

# THE AMERICAN AGRICULTURIST.



Agriculture is the most healthful, the most useful, and the most noble employment of Man.--Washington.

Vol. I.

New-York, March, 1843.

No. 12.

A. B. ALLEN, and R. L. ALLEN, Editors.

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## TO OUR READERS.

In closing the First Volume of the American Agriculturist, we cannot refrain from expressing our grateful thanks to our numerous friends and subscribers, for the encouragement they have given us throughout our arduous undertaking. It was a new and untried field, and if we have failed to produce as abundant and benificent a crop from it, as others might have done under the same circumstances, we trust with a little more experience, and the able assistance of the numerous corresponding friends who now surround us, that we shall succeed better hereafter, and give all that an exacting public may reasonably demand. For the Second Volume we propose the following improvements:—

- 1st. A new and beautiful vignet.
- 2d. A larger sheet, with a whiter and finer texture of paper.
- 3d. A greater number of embellishments.
- 4th. A more extensive and varied correspondence.

We have also at a considerable expense, greatly enlarged our subscription list of Foreign Agricultural Periodicals, and shall hereafter, as in the past two months, carefully condense their spirit and substance, into the largest space which can be allotted to this department, and thus strive to embody all that may promise to be of much practical utility to the farmer, stock-breeder, and horticulturist. This will be attended with a labor of which few of our readers can have

any conception, but our hearts are embarked in the great and glorious cause of Agriculture, and our time and humble faculties shall be severely tasked to give it all the aid in our power. We look upon Agriculture as the FIRST OF SCIENCES, to which all others are but hand-maids; and the time will come, and that we trust shortly, when the majority of this great nation will so think and act. Let a revolution of this kind be brought about, and it would soon quadruple the productive wealth, the comforts, the conveniences, and refinements of the country. Is there any one then, in this wide land, who will not give his countenance and direct aid to Agriculture? All can do something—let every individual exert himself in its behalf.

Before closing this article, we have thought it advisable to say, that the first nine numbers of the work were got out under the direct supervision of the junior editor; from January, the senior editor is wholly responsible, his brother having returned to Buffalo, and he since making New York his permanent residence. Business of an important character requires the continuance of R. L. Allen in Buffalo; and in consequence of this, it has become his wish to retire from the responsibilities of the editorial department, and the work in future will be conducted by A. B. Allen as sole editor. R. L. Allen will continue his contributions as usual, but over his own signature, and he trusts that his appearance as a correspondent, will receive the sanction of the readers

of the American Agriculturist, and not the less entitle him to their favor and indulgence. He will also take upon him the whole management of the stock at Buffalo hereafter, A. B. Allen no longer having the slightest interest in it whatever. His brother is a person of tried experience in the stock business, and it need not be feared that anything will suffer in his hands. The senior editor now comes before the public free and unembarrassed, with no claims upon his attention but those of editing this paper and serving his friends. To these objects hereafter, his whole care and attention will be unceasingly devoted, and he appeals for that support and countenance only, which he may be found to merit.

#### TO SUBSCRIBERS.

The 1st No. for April, of the Second Volume of the American Agriculturist, will be forwarded to all subscribers to the First, that they may know our continued existence. They will please keep and show it to such as will be likely to interest themselves in our behalf, but as the terms are strictly *cash in advance*, we shall discontinue sending to any who do not after the reception of the 1st No. comply with them. We have been solicited again and again to send the work out upon credit, but the low price at which it is offered will not justify us in so doing, and the publication would be attended with a serious loss. As most other agricultural periodicals begin their volumes the first of the year, it is our determination to commence the **THIRD VOLUME** of the American Agriculturist on the 1st of January, 1844.

Since we last went to press, subscriptions have continued to increase steadily, and we do not recollect a single State or Territory of the Union, which has not forwarded us a fair quota from its population. The British Provinces have also come in with their contributions, and we have every assurance to believe, that this paper will open its Second Volume, with as generous a subscription list as any other whatever in America. Its continued existence being now established, and its circulation permanent and extensive, it has become the medium of conveying knowledge to a large number, and we hope to be favored with a fair share of advertising patronage. All advertisements will be printed hereafter on the last page but one of each No. the markets, contents, and terms, on the opposite side; so that when the work comes to be bound up, the last leaf can be taken off, and it will then form a beautiful volume, with

nothing in it but permanently useful and valuable reading matter.

#### HEMP IN RUSSIA.

We are indebted to the Hon. N. P. Talmadge, of the U. S. Senate, for a report December 20th, 1845, of the Secretary of the Navy, on the cultivation and manufacture of hemp. We gather from this, that in the experiments made between American and foreign hemp, when properly grown and prepared for market, the American proves the best. Mr. Gibson, our consul at St. Petersburg, estimates that Russia grows about 7,500,000 poods (120,000 tons) of clean hemp, nearly one-half of which she exports. We beg the attention of the west to this fact.

Colonel Todd, our minister at the same court, gives an interesting description of a tour into the interior of Russia, as far as Kazan, to examine the hemp crops of that country, and ascertain the method of cultivation. He finds that a soil impregnated with lime is the best for growing hemp, and seems to think that Kentucky is too far south for the better qualities, and recommends the western belt of latitudes from 41 to 43°. We cannot agree with Colonel Todd in this opinion, for facts, so far as our knowledge extends, are entirely against him.

#### HEMP AND CORDAGE IMPORTED INTO THE UNITED STATES FOR THE PAST FIVE YEARS.

From a manuscript document from the Secretary of the Treasury, for which we are indebted to the Hon. Millard Fillmore, we see that during the years 1838, 39, 40, 41, and 42, the following amounts of hemp and cordage were imported into the United States, viz: 2,374,373 lbs. untarred cordage, valued at \$113,024—7,665,226 lbs., tarred ditto, valued at \$451,673—2,735,733 lbs., twine and pack-thread valued at \$550,598—41,769,056 lbs. hemp, valued at \$2,620,409.

It will be recollected that the above are the Custom House returns, and to express the value in this market where the articles are sold, about 40 per cent. on the average should be added.

#### ORNAMENTAL SHADE TREES.

We have often wondered why in this climate, where winter rules so long, and most of the deciduous trees are left destitute of their vegetation, nearly five months of the year, that a greater profusion and variety of evergreens are not cultivated, especially in the ornamental grounds immediately around the houses of our country residents. They



lend a cheerfulness to the landscape, otherwise so dreary and bare at this season, that is quite delightful, and bestow a comfort among the grounds in sheltering them from the cold winter winds, which is not otherwise attainable. Pines, hemlocks, and firs, we have heard objected to by some, as conveying the idea of gloom, why we never

could divine, for to us they ever appeared no less enlivening than beautiful, and we have always endeavored to promote their cultivation.

Perhaps one of the handsomest evergreen trees of America, of the medium size, is the *Abies balsamifera*, popularly known as the Silver or Balsam Fir.



THE SILVER FIR.—(FIG. 36.)

This is more usually found in Nova Scotia, the Canadas, and northern states; but it occasionally flourishes on the high mountains as far south as the Carolinas. It rarely grows above 45 feet high, or has a diameter of over 15 inches of trunk. The foliage is dense and singularly rich and beautiful; being of the brightest green on the top of the leaves, and beneath of a silvery white, and hence its popular name. It flowers in May,

and the cones are quite fragrant. This tree produces a small quantity of resin, which is sold under the name of Balsam of Gilead in Europe and America. Its wood is of but little value. This and the next, are the most favorable months for setting out trees, in the latitude of 40°, and we have thought we could not do our readers a greater favor, than to call their attention to the Silver Fir, as one of the most ornamental among the ever-

greens, and particularly appropriate for adorning the grounds around the family mansion.

The best location for evergreens is a gravelly, sandy, or rocky soil. Certain kinds also do very well in a surface of light loam, when the sub-soil is a hard tenacious clay; others again flourish in swampy lands.

#### PINE BROWSE FOR SHEEP.

Pitch or white pine boughs are excellent for sheep to browse upon once or twice a week; they create an appetite and keep off disease. Cut down the saplings and drive the flocks to the grove, or draw them home to the sheep-fold.

#### TOUR IN ENGLAND No. 11.

Having a standing invitation from our excellent friend H., to visit him whenever convenient, after looking over the curiosities of the large manufacturing city of Sheffield, we concluded to test his hospitality, and at the same time take a lesson in English farming, of which he is a great amateur. We accordingly mounted the stage-coach once more, taking our favorite seat on the box alongside of the driver, and after a rapid set to of a couple of hours of "tooling the tits,"\* as our Jehu technically termed it, over a pretty, undulating country, we passed a wide common on which a tribe of gipsies had encamped, and were almost immediately set down in the neat and quiet old town of Worksop. Here we ascertained that the residence of our friend, Mr. H., was some eight miles distant; but his brother near by, learning that we were in the village, kindly welcomed us home, while he sent him notice of our arrival.

After cursorily looking over an exceedingly well cultivated farm, of a thousand acres, he ordered out saddle horses, and proposed a ride over the neighboring estate of the Duke of Portland, lying partly in Sherwood forest, famous for the feats of Friar Tuck, and the celebrated outlaw, Robin Hood, who in days of yore "entertained an hundred tall men and good archers," and according to the old ballad, was the prince and beau ideal of all captains of banditti.

"Robyn was a proude outlaw,  
Whiles he walked on y ground;  
So curteyse an outlaw he was one,  
Was never none y founde."

And the *historian* says: "He suffered no woman to be oppressed, violated, or otherwise

\* A cant phrase with coachmen for driving.

molested; poor men's goods he spared, abundantly relieving them with that which, by theft he got from abbeys and the houses of rich Carles."

The estate of the Duke of Portland is a noble one, the plantations flourishing, and the covers for the game, of fern and gorse, quite thick. The pheasants were so tame that we might almost have knocked them down with our whips as we rode along; partridges also were abundant, and hares and rabbits without number. The park was full of fallow deer, lusty and fat, and amounting to 700 head at least.\* Most of these are spotted like American fawns, but a few are white, and others almost black.

Here are some of the largest trees we saw in England. The Welbeck oak, 3 feet from the ground, measures about 30 feet in circumference, and the Greendale oak, through which the Duke once drove his coach and four, we judged still larger. It is a very old tree, probably a thousand years, is hollow, and so decayed, that it has to be propped up on one side, and is preserved with great care and veneration. Would that we could say the same of more of our own larger and equally valuable trees in America; but there is a spirit of ruthless destruction of such things among us, especially in new settlements, which cannot be too greatly deplored. Yet we hope one day that an era of good taste will spring up in our land, which shall guard these aged monarchs of the wood, and preserve them with the same care and veneration that they now are in England, for they are our only antiquities.

The Duke of Portland, with all his splendor, is an excellent farmer and matter-of-fact man, and being absent from home, the steward was directed to let the sheep into the park with the deer, to pasture it; and here we saw beautiful flocks of South-downs in large numbers, feeding even upon the lawn close up to the front of the residence of their noble master. The hall is a fine old Abbey, and the housekeeper politely showed us over the state rooms, where we found beautiful paintings, costly furniture, and gems of art in great profusion. The private chapel attached to the Abbey, we believe is of Saxon origin, and is consequently of quite ancient architecture.

The stables are superb; in America they would pass for a stone palace. The servants

\* This may seem a large number to our readers, but other parks which we subsequently visited, we were informed, contained from 1,500 to 2,000, all belonging to one nobleman.



are lodged in the second story of one wing of the quadrangle, and a pleasant residence it is too, for flowers were blooming in the windows, and many elegancies there that any person of taste could not but delight in. Here we found a pretty fair lot of racing nags, and some capital hunters, and after viewing the gardens, delighted with this princely estate, we rode home through a late purchase of the duke of Newcastle, where a large body of laborers were ditching and laying down tiles for draining in an extensive meadow, and further on our way, we passed the ruins of a fine old Abbey church on the borders of Worksop.

Upon getting back, we found our friend H. had arrived, and was waiting us; so after a late dinner, we set out for his hospitable mansion. This was built by the St. Legers; it is large and roomy, with octagonal projections, and plenty of out buildings in quadrangles in the rear, enclosing ample court yards. The door of the library opens into a large old-fashioned garden, with turf walks, trim box borders, formal fish-pond, conservatories, grass terraces, a venerable sundial, and high brick walls on three sides, to which fruit-bearing espaliers are trained all round. The garden was full of flowers, fruits, and vegetables; and as we are particularly fond of the two former, his kind and accomplished lady, regaled us morning, noon, and evening, with the second, and every night in our sleeping apartment, we found a large bouquet of the first, fresh gathered by her own fair hands, and adorning the pier table. Such things may be called trifles, but they add greatly to the pleasures and happiness of life. We had then passed about two months of most fatiguing travel, and were glad at last, to meet for a few days, with the agreeable repose furnished us at Park Hill, and accordingly while staying there, took matters quite easily; sauntering over the farm, patting the dogs, eyeing the game, examining crops, handling the cattle, settling the merits of a cart-horse or hunter, and taking lessons in general upon English agriculture.

On the third day of our stay here, Mr. H. proposed a visit to Wiseton, a few miles off, the seat of the celebrated Earl Spencer, to look at his stock of Short-horns. To this we most gladly assented, and he ordered out his fine black American trotter, hitched him to a two-wheeled chaise of Massachusetts fashion, which we think was also imported, and thus Americanised, away the high spirited animal tramped with a free and easy action over the beautiful MacAdam roads of old

England, rapidly passing everything which we encountered along the road, without an effort, just by way of giving John Bull an exemplification of the Yankee *go-ahead* principle.

There is a most excellent road law here, which we could wish much to see adopted in America; and that is, to pass all you meet to the left instead of the right. And this is much more agreeable to common sense and convenience, and avoids danger very frequently; for if the teamster be walking alongside of his cattle, and do not leave them entirely, he is in danger of being crushed or injured, between his own and the wheels of the vehicle he meets; and besides, the driver always sitting at the right hand can more easily guard against striking the axles of his wheels when he passes to the left, which is a matter of no small importance in a crowded or narrow thoroughfare. We wish our city and state authorities would bring their attention to this subject, and alter the law of the road, making the *left* in reality the *right*, as we recollect once seeing expressed in an odd stanza of a rhyming wit.

The rule of the road is a paradox quite,

In riding or driving along:

If you keep to the *left*, you are sure to go *right*,

If you keep to the *right*, you go *wrong*.

We had an introduction to Earl Spencer, at the Yorkshire Agricultural Show, and it was much to our regret to learn upon arriving at his seat, that he had left the day previous for London, to move the address to the Queen in the House of Lords, at the opening of Parliament. Mr. Hall, the steward, we found at home, however, and he quite politely showed the estate and the whole herd of Short-horns. Earl Spencer has really some excellent animals, and has generally been successful in obtaining prizes for them at the great annual shows of fat cattle in the Smithfield market. Mr. Hall informed us that the Earl disliked exhibiting at the Agricultural Shows, so long as the public taste demanded loading animals with so much flesh, as he did not wish to endanger his breeders by over feeding for such exhibitions. Among his stock we saw several descendants of the famous bull Firby, figured by Youatt in his work upon British cattle. Judging from these, he must have been a superior animal, and upon the whole we were highly gratified with a view of the stock. Earl Spencer is certainly a judicious and scientific breeder, and an eminent practical as well as theoretical agriculturist.

Among other things here, we were shown a specimen of uncommonly productive meadow, reclaimed from low swamps and ponds, where there was not sufficient fall in any adjacent stream to take off the water. The fields are embanked all round several feet high, so that water cannot flow in from without; a flume is then sunk lower than the meadow in a short raceway, to which all the water in it is drained by ditches. In this flume, driven by wind-mill power, a large scoop-wheel is placed, which, as it revolves, takes the water up in its buckets, and deposits it on the other side of the dike, from which it flows off, thus keeping the meadow perfectly dry when necessary, in all seasons. When there is not sufficient wind to move the water-wheel, steam power is applied from an adjacent building for this purpose. This may be considered as a very expensive business by Americans, but when we consider that a steam engine, with one bushel of coal, which only costs a few cents, will raise 50,000,000 lbs. of water one foot, it will not be thought quite so formidable an outlay of capital. Several districts in England of thousands of acres in each, are thus reclaimed from the sea and drained.

Everything about the estate of Wiseton, was in order. The houses of the laborers are handsome two-story stone cottages, with flowers trained up their walls, trim hedges and grassplots in front, and good gardens in the rear. They are such buildings as any of our independent farmers at home might covet for a residence, and we were informed that the Earl never suffered his tenantry to go to the poor-house; for if at any time in want, they are amply provided for at home by himself. Mr. Hall, the steward, was as neatly dressed as if he had just emerged from a bandbox, rather than a cattle yard; with polished shoes, neat gaiters, and well set small clothes. His own residence was charming, with pretty gardens about, and a well stocked conservatory. But the steward or bailiff of a nobleman is a pretty important personage, and is generally much looked up to by the surrounding neighborhood, for they are frequently well educated men, and scientific, as well as practical breeders and farmers.

Earl Spencer is a fine looking man, over fifty, though he does not look it. He has a keen dark eye, florid complexion, good height, and reasonably stout person. He was a long time leader of the House of Commons when Lord Althorp, and had a seat in the Whig Ministry under Earl Grey. He is

quite farmer-like and gentlemanly; plain in his dress, and we were informed, rather diffident and retiring in his manners. He is very popular with the agricultural classes, and has done more to promote improvements in husbandry, than any other nobleman of his day in Great Britain. If he would accept office, in any future change in the ministry, he would be very likely to come in as Premier; but he dislikes politics, and except when he thinks duty imperiously calls, mingles little in state affairs. His pride and pleasure seems to be in attending agricultural shows, and holding converse with the intelligent farmers and breeders of the country. To all such men, whatever be their rank or station in society, we wish long life and all happiness.

#### SHEEP HEALTHFUL TO OTHER STOCK.

A VARIETY OF STOCK THE MOST ECONOMICAL FOR THE FARMER.

We are advocates for that system of stock raising, which gives a reasonable variety to the fields and yards of the farms. In addition to yielding a more general supply for the owner's use, and thus carrying out the great principle every farmer should practise, *to buy nothing he can produce within himself*; there is great economy and profit in it. There is generally in every field a variety of plants which are suited to different classes of animals; the horse selects one or more which he crops closely; the cow fancies others which she browses upon till exhausted; while the sheep follows after and nips what both have rejected, and is moreover peculiarly useful in exterminating, when not over fed, most of the noxious weeds that infest the pastures. In the hay-rick, too, the same preferences are exhibited; the orts thrown out from the horse-manger are eaten with avidity by the cows and sheep, and the latter picks up the merest leaflets neglected by the others. Thus Providence seems to sanction in the diversity of the vegetable creation, the propriety and advantage of distributing and appropriating them among numerous species of animals.

We are strengthened in our conclusions, by the beautiful yet simple legend which is related of the well-provided travelers, who, while eating their full repast by the way-side, were accosted by a beggar, whose cravings were appeased by what they had rejected. The beggar's dog made a bountiful meal on the bones his master could not eat. The sparrows followed and fed themselves and young from the crumbs, and the ants then



gleaned treasures for themselves and progeny. The story might have been continued by adding as many more successive banquets for the invisible creation which the microscope would have revealed.

Every farm should be supplied with a few of the hardier kind of sheep. They cost little for keep, require trifling attention, yet how much they administer to the wants of a household. The warm clothing they furnish, how comfortable in the inclement season of the year, from the woollen cap and tippet, through all the under and outer garments, to the soft hose and health-preserving oversock. They cover our beds in the wintry nights, and they cover our floors with carpets, which afford a warmth and luxury to our feet a sultan might envy. And how easily all these articles may be procured from a few choice fleeces? When not convenient for the housewife or her family to manufacture them, they can be readily made into the different kinds of fabrics on shares, or exchanged for such as are already prepared; or they are ever a ready sale at fair remunerating prices. And how agreeably too, is the pork barrel eked out by the luscious, well-fed quarters of the mountain lamb, and the fresh meat of winter, varied and prolonged by the stall-fatted mutton. But we must not enlarge on so familiar a subject, and will only add a paragraph, which we find credited to the Farmers' Journal, so appropriate and so beneficial to the farmer's interest, that we bespeak for it a careful perusal.

"The orts of sheep are sometimes found to possess medicinal virtues for other stock. We once owned a sick horse, whose disorder seemed proof against other medicine, and by keeping him wholly on sheep's orts, which were mostly raked out of the manure, where they had laid for a month or two, and which were readily eaten, a speedy cure was produced. We know not enough of *horseology* to determine what the disorder was. It was attended with a severe cough, loss of appetite, leanness, and general debility.

"It has been stated, and by our observation confirmed, that calves that run with sheep, are never infested with lice, and not liable to disorders, and this method of taking care of them is very convenient, as they may be kept in a yard with the sheep, separate from the other cattle, and watered in the morning before other cattle are turned out, which are liable to disturb or injure them. After the stronger cattle are housed early in the evening, the calves may again go to the water in peace and safety. When calves

run with sheep, it may be well to tie them up a part of the time in the latter part of winter or in the spring, else they will be more difficult to manage the second winter, if not accustomed to confinement and frequent handling to tame them the first winter.

#### ENGLISH TARIFF ON AMERICAN PROVISIONS.

We notice under date of Dec. 14th, in our files of English papers, that it is announced by an *official note* from the Privy Council of Trade, that "the hams smoked and dried in Canada from American salted pork, would be subjected to the same duty as hams of Canadian produce, viz: 3s 6d per cwt.

This official announcement of reducing the duty 75 per cent, on one important article, corroborates our suggestion in the Dec. No. of our paper on this subject, that the British Government are willing to take our products at the rate of the Provincial duty, if Americans choose to give English merchants and their shipping all the profits of the business.

We also notice, that a part of the Canadian loan, we suggested as having been arranged for the benefit of their internal improvements, to carry out the above policy, has been offered to the English capitalists, all of which will be taken on the most favorable terms.

#### RESULT OF BREED IN SWINE.

Mr. J. R. Williams, of Buffalo, gave us a statement a few days since, by which some of our readers may be benefited, as illustrating the difference in *breeds*. He bought two pigs last spring, about six weeks old, for which he paid \$3 00. His object in procuring them was for *the breed*, as they were so small and indifferent at that age, that both occupied less than half the space in the bottom of a flour barrel. He took good care of them from that time, and kept an accurate account of the feed, which was principally corn meal, (for which he paid 37½ cents a bushel,) with an occasional addition of oats, &c., all of which cost something less than \$20. They were slaughtered in December last, at the age of nine months, *precisely*. When dressed and hung up for two days, they weighed in the presence of several witnesses, 304 and 310 lbs., total 614 lbs. It will be seen, after deducting the toll, one-tenth, for grinding, they returned 1 lb. of pork for every 4 lbs. 6 oz. of corn consumed.

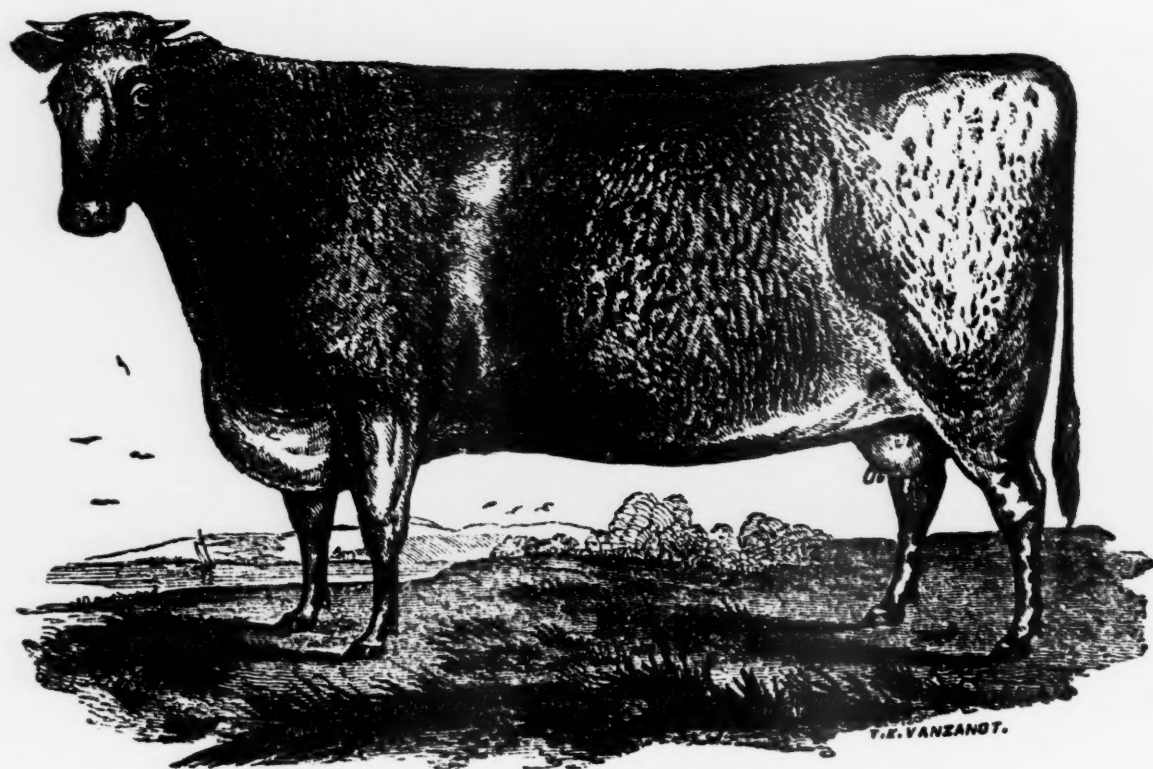
But this is but part of the account. While other good pork was selling freely in the market for 2 and  $2\frac{1}{2}$  cents per pound, he was repeatedly urged to take 4 cents for these pigs, but says he can do much better with them by packing. He fattened some nearly as good last season, and what was not required for his family use, he readily retailed at 8 cents, on account of its superior quality and flavor, while other good pork was selling at 5 cents. More clear, beautiful pork we never saw, and the only objection we could conceive to it, was the almost total absence of *lean*. Such pork is worth nearly the price of butter for food, and it might be tried into

lard, with but little waste. The pigs were half or three-fourths Berkshire, and the remainder Leicestershire.

#### DECEMBER NOTES FROM BUFFALO TO NEW YORK.

As to the forms of Mr. Prentice's cows, we neglected to make any notes at the time, but the general impression left upon our minds is, that they are good. But here we prefer, when we have engravings, to let the animals speak for themselves, and therefore introduce Moss Rose, imported from England, October 1841, as a fair specimen of the sisterhood

SHORT-HORN COW MOSS ROSE, IMPORTED.—(FIG. 37.)



*The property of E. P. Prentice, Esq., Mount Hope, N. Y.*

In the milking qualities of this fine herd, we took care to be more particular, and here several of them are great; Mr. Prentice having determined from the commencement of his breeding, to make deep milkers an essential point in his stock, and he was at the pains when lately in England, to select these himself for importation.

However much breeders may differ in regard to the points in an animal which denote great milking qualities, so far as our knowledge extends, this one thing seems to be settled, viz: they must have large udder veins. In handling these, in some of the cows we

found them more than half as large as our wrist, and they also gave other indications of possessing the power of concocting large quantities of milk from their food. When in good grass pasture, Appolonia has given 26 to 30 quarts per day; Splendor, 2 quarts less; Susan, 28 to 31 quarts; and several other cows of this stock are nearly as good milkers; but as Mr. Prentice has not had it accurately measured, he does not wish to state an opinion as to the quantity, it is however, his intention to have them all measured during a definite time next summer, and ascertain also the quantity of butter made from it,



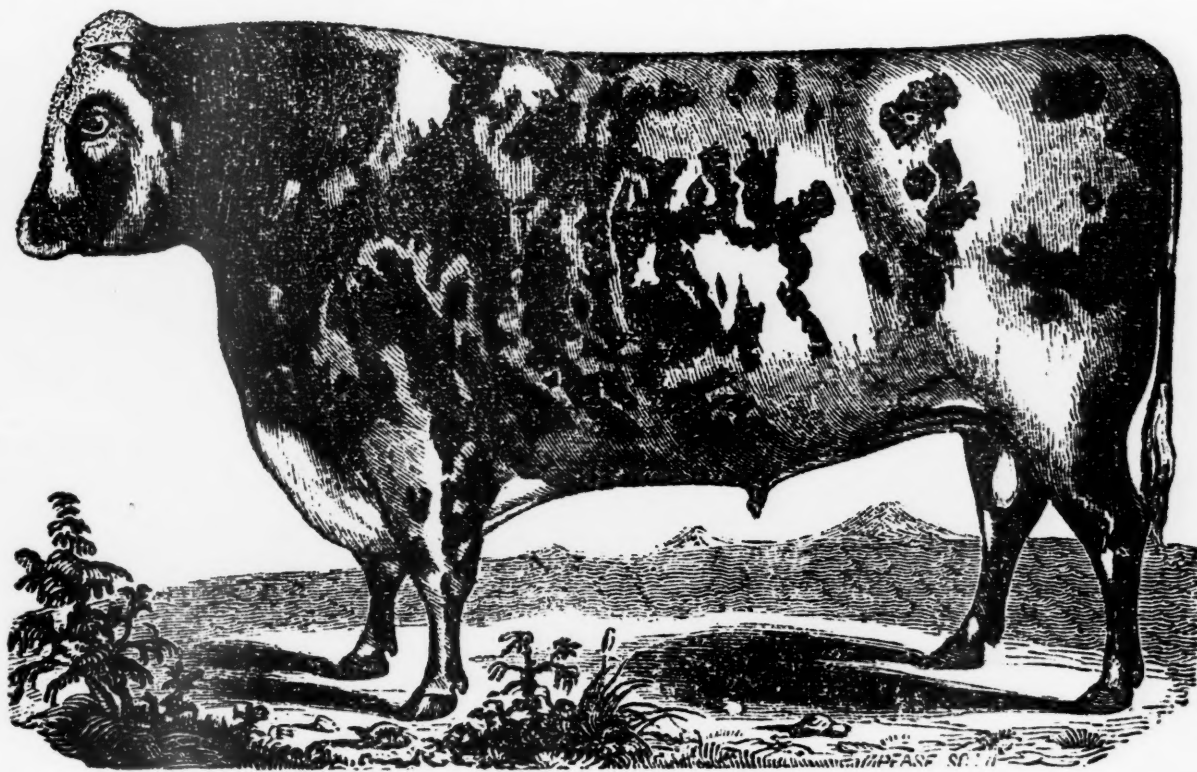
and we trust that we shall be favored by his report when completed. We like to see the rule, the measure, and the scale applied in every instance that it is possible; for these are the only true test, and to these alone we look for our standard of information.

Mr. Prentice's stock is kept in fine order on precisely the same food as other farmers keep their cattle—hay and straw; and we understood him to say, that some of the incalf heifers were not then stabled, but kept in yards with sheds open on one side to re-

treat to when they chose; and he contends that they are the poor rather than the wealthy man's stock, inasmuch as they give more milk and beef for the food consumed, than can ever be realized from a herd of natives. His herd consists now of about forty in all, and to any one desirous of purchasing, we can only say they will find here a good selection at fair prices.

We give another bull of Mr. Prentice's breeding before concluding this article, in consequence of seeing him on board Steamboat last summer on his way to Ohio.

SHORT-HORN BULL LEOPARD.—(FIG. 38.)



*The Property of E. P. Prentice, Esq., Mount Hope, N. Y.*

He was sold to Mr. Sandford Howard, of Zanesville, and took the first premium at the Fair held there last fall. Mr. Prentice has also sold stock into Massachusetts and elsewhere, which we understand is much liked. We shall probably come across them in our future rambles, and if so, we shall then hope to transfer them and their doings, to some future number of this paper.

#### SILK IN OUR STATE PRISONS.

We learn from the Supplementary Report of the agent of the State Prison, at Auburn, that the manufacture of silk was commenced there in May 1841, by the introduction of a single throwing mill. Since this it has been

gradually increasing, and there are now in the prison, twelve throwing mills, with sixty-four spindles each, twelve bobbing wheels, twelve stationary wire swifts, eight pairs of horizontal swifts, one drying rack, two quilling mills and apparatus, one set of reeling pins, ten 72 inch reels, twelve 44 inch reels, one band maker, a dye-house with kettles, &c., &c. The machinery is moved by steam power, and forty convicts are now employed in the business; and the returns for their labor show as great a profit as any other of the mechanical departments.

The sewing silk produced here is superior to anything imported, in strength, softness, and color. The agent has purchased from

May 1841, to February 1843, 1052 lbs. reeled silk, at a cost of \$5,126, and 984 bushels cocoons, costing \$3,290.

The above facts will show that the manufacture of silk is a promising business in this State, and when we consider that most of the convicts employed in it had no previous experience, that much of the machinery in use is bungling and imperfect; besides other disadvantages which we could mention; the only wonder is, that it has succeeded at all, and we think the agent, Mr. Polhemus, deserves much credit for introducing and carrying it on so successfully.

TO PREVENT MICE, GRUBS, AND INSECTS FROM  
HARBORING AROUND THE ROOTS OF FRUIT  
TREES IN WINTER.

Before the ground is frozen in the fall, scrape away the loose mould from the trunk and supply its place with lime and ashes—mice and moles will not come to disturb the bark and burrow among the roots, when so strongly protected with alkalies; and the insects and their larvæ will be effectually exterminated by the contact, and the tree and its fruits will be saved from their destructive ravages the following season. The value of this application as a manure for the tree will abundantly remunerate the trouble and expense.

MANAGEMENT OF CALVES.

Have as many calf bows made in winter as you expect to have calves in the spring; hickory is the best wood for these; split it out and whittle or shave it down to the size of a whip-stock, leave a knob on one end, and cut in a notch at the other end. The average length before bending, should be from 18 to 28 inches, according to size and age of the calf. The cap to go over the ends of the bow has a hole  $\frac{3}{4}$  of an inch at one end, and a hole the same size 2 inches from the other end. An inch from this hole towards the end, bore a half-inch hole, and cut a mortice of half an inch from one to the other, so that when the bow is put into the three-quarter inch hole to the neck it springs back through to the end of the mortise and remains stationary until removed.

For ties we would recommend light trace chains, with a small ring at one end large enough for the bow to pass through, and a fixture at the other end to fasten it to the calf's trough or manger, with a swivel to keep the calf from twisting up the chain, which any common blacksmith can make and put in. These bows will last for many years as we

can testify from our own experience, and can always be had ready whenever there is a new calf dropped. The advantages of tying up calves in a calf house until weaned, is to halter-break and make them perfectly tame and docile, so that they never forget it; it also accustoms them to eat at an early age. Hay, or new mown grass, roots, oats, shorts, or indian meal, are usually much cheaper food than milk, it can consequently be saved for family use by substituting these kinds of feed, and the calf be pushed forward with about the same rapidity. Water is essential once a day, notwithstanding the calf may have milk morning and evening. It is important to keep the calves out of the scorching sun and away from the tormenting flies and wood-ticks in summer; and from pelting storms and cold at other seasons of the year. By keeping them well bedded with straw and throwing it out under a cover, such as may be made cheaply from loose boards laid upon poles in crotches, and mixing muck, sods, or road scrapings with it, a good pile of rich manure may be made in a few months from this source alone.

FARMERS SHOULD NEVER RUN IN DEBT.

As a *general rule* they should not incur any debt. The *exceptions*, they will be ready enough to find out themselves, and we leave them to their own ingenuity, and content ourselves with giving *three* reasons for the rule:—

1st. *There is a want of economy in the practice.* No man can afford to sell as cheap for credit as cash, for besides the insecurity that attaches to all claims, against even the best man, the trouble and expense of keeping accounts, and collecting debts, are an additional charge on the article purchased, which the seller is sure to estimate in settling the price of his property.

2d. *It begets habits of extravagance.* When a person has property under his exclusive control, which according to the customary usage of the world, is called his, however much he may be indebted for it, he is insensibly led to act with it, as if he were under no obligation to use any exertion for providing the means of repayment.

3d. *It is attended with great risk.* An honest reasonable debt in the estimation of a high-minded, honorable man, is a mortgage not only on the property he already possesses, but on all he ever expects to own, as well as his future exertions in life. How inconsiderate then, for one who already has something he can call his own, to incur an obli-



gation, which sickness, misfortunes, or unlooked for changes, may place it out of his power to meet; subjecting his other property to the risk of loss for the payment of this, and perhaps leaving him, after all is gone, a prey to remidiless anxiety and care.

#### SAVE YOUR DEER BONES.

We were in a shoe shop a day or two since, and noticed a large, gracefully-shaped bone, as clear, smooth, and dense almost as ivory, which was used for wedging out shoes when on the last; on inquiring we found it was from the lower hind leg-bone of a deer. This is split from the pastern joint, which forms the knob or handle, as far up as required towards the gambril joint, and the upper end is dressed down, and this small article made in an hour, from what is usually thrown away as useless, is worth from 25 to 50 cents, and as each leg furnishes two, the hind legs of a deer are worth from 1 to \$2 each. We believe *all* the leg bones are valuable, though perhaps not equally so. The horns are always in demand. The aggregate of such savings may add thousands to the wealth of the country, and greatly to its comforts.

#### IMPROVED CULTURE OF COTTON.

Under this head Dr. N. B. Cloud of Alabama, is writing a series of articles for the Albany Cultivator, detailing what he terms an improved system of cultivating cotton. By this he says he obtained a crop of 5,989 lbs. to the acre, and thinks it possible he may be able eventually to double even this enormous yield. His system may be stated in a few words.

1st. To let the land lie in fallow the year previous to planting.

2. To manure as highly as four to five hundred bushels of rich compost to the acre, and this manure he contends may be made upon every plantation, at a cost of not over two cents per bushel, by keeping stock and saving all litter, and mixing with it plenty of muck or marl, according to the most approved Northern methods.

3d. In preparing his land, he first runs off his rows with a scooter plow three feet apart, and then cross-plows these five feet apart with a shovel plow, planting the seed at every cross of the furrows, and thus gets 2,940 hills on each acre.

4th. He uses *improved* seed, which previous to planting, he rolls in leached ashes or sand, or in a compound of two parts of ashes

to one of common salt, made moist with water, and then drops eight to ten in each hill, and covers with a light hoe.

5th. Soon after coming up he runs scooter and shovel plows down the rows. The hoe hands subsequently follow and thin out the cotton to two good stalks in each hill. By this method bar-shearing, scraping, and chopping out are saved, and the after culture is done by a kind of horse-hoe called a sweep.

FIG. 39.



This instrument is thus described:—

"It is easily made by any blacksmith, by laying the wings *a b* and *a c* upon the point of a scooter *d* in the form of an isosceles triangle, which is fastened upon the chip of a shovel plow stock, by a heel pin, in the same manner you would a shovel. From the tip of the wing *b* to that of *c*, it should be 2 feet, forming a kind of horse-hoe, by which a row is swept out at three furrows. This should be so curved and graduated upon the stock as not to go into the soil deeper than 1 inch, and as much less as possible, to enable it to cut the young grass and weeds that may be springing up. The great and singular advantages of the sweep over all instruments of the plow, harrow, or hoe kind that I have ever used, are these—that it will *kill* a greater quantity of grass and weeds in a given time, and *do less injury* to the surface roots of the plant, so essential to its *progressive* prosperity. The hoe hands following this instrument, thin the cotton to a stand, *one stalk* in a place, and draw up a small quantity of soil to the standing plant."

We are unable to speak as to the probability of obtaining as large crops as Dr. Cloud's on the average of soils in Alabama, although from the description he gives of his land—"forked leaf, black-jack, pine barren, a deep, porous, sandy superstratum, lying upon a tolerably good clay, at a distance of 2 to 3 feet below the surface;" one might infer that it was anything but rich. We can only add, that instead of a naked fallow, we should prefer a rotation of two years in grass with stock to feed it off; and then one or two years as the land would bear it, of cotton cropping. Sheep would be the best and most profitable stock for the southern planters. We calculate here that the increase of the flock nearly pays all expenses, so that the wool is clear gain, after deducting the interest on first cost of the animals. What then would be the profit of growing wool at the south, where the animals will get a good living in the open fields throughout the year? Choice Merino wool clean washed is now worth in this market 30 cents per lb., could it not be produced at the south for 15 cents?

If so, after deducting all charges of marketing, it would leave the planter a handsome profit. No sort of stock will renovate lands so cheaply and quickly as sheep.

Report of the Committee on Stock at the N. Y. S. Ag. Soc., Meeting, Sept 1842, of Classes V., VI., VII. and VIII.

The Committee of the "N. Y. State Agricultural Society" on Cows, Heifers, and Heifer Calves, comprising classes V., VI., VII. and VIII., respectfully report:

That they have attended to the duties of their appointment, in which they experienced the embarrassment usual on such occasions, from finding the animals numerous, while the premiums were few,—but adopting the rule that a majority in number of the committee, should, of course, be decisive in all cases, they arrived at the following results.

In Class V., the Society's 1st premium was given to Mr. Sherwood's Durham Short-horn cow, *Stella*.

" " the 2d premium to Mr. Prentice's cow, *Daisy*.

" " the 3d premium to Major Dill's cow *Gazelle*.

" " the diploma to Mr. Sherwood's cow, *Pansy*.

In Class VI., the 1st premium to Major Dill's heifer, *Hebe*, (a capital animal.)

" " the 2d premium to Mr. Prentice's heifer, *Sally*.

" " the 3d premium to Mr. Prentice's heifer, *Caroline*.

In Class VII., the 1st premium to Mr. Sherwood's heifer, *Norna*.

" " the 2d premium to Mr. Prentice's heifer, *Charlotte*.

Your committee saw no other animal in this class, which they deemed, on the whole, worthy of being honored by the Society's diploma, which was accordingly withheld.

In Class VIII., the 1st premium was awarded to Mr. Prentice's heifer calf, *Nell*.

" " the 2d premium to Mr. Prentice's white heifer calf, *Duchess*, (by *Fairfax*.)

" " the diploma to Mr. George Vail's heifer calf, (got by his imported bull *Wellington*.)

Your Committee found it no easy matter to decide among so many fat calves as were shown in class VIII., their respective merits and faults being alike covered and hidden by flesh, so much so, that they were really better adapted for the inspection of a committee of butchers than of breeders. The practice, now too common, of fattening breeding animals for exhibition, is not only wholly without utility, but is so bad and injurious in every point of view, that it ought to be discountenanced.

It will not fail to be noticed that all the foregoing premiums are given to animals of the valuable breed known as "Durham short-horns," against which kind there was, on this occasion, no other breed shown in competition, except Herefords, of which there was a beautiful and very creditable exhibition, consisting of a portion of the herd of Messrs. Corning and Sotham, some individuals of which, this committee would highly commend, especially as being good specimens of that important quality *good handling*, always essential to excellence.

Your Committee, (of which a portion, if not a major-

ity, is composed of what might be called Short-horn men, either by preference or by interest, as Short-horn breeders,) from motives of delicacy, not to say generosity, did not deem themselves called on to decide between these two rival breeds, and against the Herefords, which would have been for the most part and in effect, their decision, if made on this occasion. In England, the home of both breeds, where *beef* is the first and almost the ruling consideration, the Herefords as a breed, it is well known, have long maintained a sharp and often successful competition with the Short-horns, for *feeding* purposes, especially as a *grazing* stock; while it is claimed, and now generally conceded, by well-informed, dispassionate persons in England, that the *well-bred* Short-horns have the merit of earlier maturity, and are also entitled to the preference for stall-feeding, and more especially and decidedly so, for dairy purposes, in which the Short-horns and their crosses are believed to excel all other breeds, and that the pure bred males of this breed are capable of improving all other breeds of cattle; certainly a most important consideration, and especially so in this and all the northern portion of the United States. It is understood that the Herefords have not yet been sufficiently tried in this country, as milkers, in the absence of which there seems to prevail at present an unfavorable impression of them as dairy stock; which impression, it is to be hoped, may soon be done away, if, as their friends claim, the Herefords are really a superior milking breed. Some of their *crosses* with native stock, now exhibiting in Massachusetts, descended from an importation of Herefords made many years since by Admiral Coffin, are understood to have proved excellent milkers. It is, besides, claimed for the Herefords, that they will make good working cattle, being strong and active, which is not doubted. It is also conceded that the quality of the Hereford beef is excellent. Therefore, taking no more than a fair view of their case, the Herefords must, in all probability, prove a highly valuable stock in those portions of this country where the *grazing* of cattle for *beef* is the primary object. Under these circumstances, your committee would ask, in behalf of the newly imported Herefords, a *fair chance*, and that they be allowed (after coming from on ship-board) to get well upon their feet, before they "enter the lists" against the now well-established Short-horns. If the Herefords are cherished and encouraged for a time, it is to be hoped that the now favorite Durhams may, by-and-by, in future competition, find in them "foemen worthy of their steel."

In view of the foregoing considerations, your committee would respectfully beg leave to recommend that extra premiums be awarded to the Herefords, as follows:

To Mr. Sotham's cow, *Matchless*, fifteen dollars.

" " " *Martha*, ten dollars.

And a diploma to his heifer *Maria*.

If the Herefords were distributed in more hands, so as to give room for competition among themselves, your committee would suggest the expediency of hereafter offering premiums for them, distinct from other breeds. Also for *North Devons*, a highly useful and most valuable breed, especially on light soils and in hilly districts of country.

Your committee cannot, in justice, close their report without remarking on the *great want of order* and good arrangement in the show-yard, of the classes of stock which they were called to examine, by which the loss of much time was caused to the committee, and their labor greatly and needlessly increased. The giving of so many classes, and of totally distinct breeds, to one and the same committee, (the show of animals in each



class being numerous,) put more duty on this committee than they could thoroughly perform within the allotted time; added to which, they were annoyed and impeded in the execution of their task, by the crowd of spectators following and pressing on them during the examination of the animals,—and finally, considerable of the stock was removed before the committee could complete their duty of inspection and review, which fact must be taken in explanation of the omission to award the Society's diploma in Class VI. The want of information as to how the animals had been fed; also as to the *milking* qualities of the cows, and occasionally the *pedigree*, was much felt by the committee, who, in the absence of this needed information, were in many instances, left to grope their way in the dark, to a decision, of course in some cases not wholly satisfactory even to themselves. Nor did they find persons in attendance, to lead out the animals for a more full and careful examination, especially as to their style of carriage or movement, which, it is needless to remark, is, as well as form and handling, an essential element of any intelligent opinion or critical decision on their merits.

These difficulties and evils are worthy of attention and reform, and admit of an easy remedy in the future exhibitions of the Society. In the meantime they must serve as an explanation of the possible omission of your committee to notice, duly, some few of the animals shown.

All which is respectfully submitted.

DAVID C. COLLINS,  
J. S. HITCHCOCK,  
W. K. TOWNSEND,  
CHARLES BROOM,  
R. L. ALLEN. } Committee.

Albany, Sept. 29, 1842.

## Editor's Table.

### NOTICES OF THE PRESS.

**THE NEW GENESEE FARMER.**—The January No. is at hand, which we find an enlarged quarto of 16 pages, neat type and paper, and well filled with matter, interesting and instructive to the agriculturist. It is published at Rochester, this State, by Crossman and Shepard, and edited by Henry Colman, Esq. The price has been raised from fifty cents to one dollar a year, and cheap enough it is too, at that. Indeed a dollar is so trifling a sum, that we are perfectly surprised that any one should desire an agricultural paper for less than this amount; for as certain as any justice is done to the work, the publishers must lose money at it.

**TENNESSEE AGRICULTURIST.**—No. 1, for January, of the 4th vol. is now out. This has always been a favorite with us, as our communications formerly to its columns will testify. It is issued monthly, in 24 quarto pages, and its price is now reduced to One dollar a year, which will no doubt greatly increase its circulation at the south-west, and add to its usefulness. One of its editors, Mr. Fanning, proposes opening a school for twelve pupils, at his own residence, 5 miles from Nashville, where, to the usual branches of intellectual and moral culture, he will add stock-breeding and theoretical and practical agriculture. To attain these ends, a few hours each day will be spent in the garden and on the farm. These last branches are almost entirely a new feature in education in this country, and have hitherto been entirely overlooked; but we believe the day is not distant when a great public change will take place in regard to these matters, and that theoretical and practical agriculture, and stock breeding, will be

among the *indispensible* departments of the higher classes of all good schools out of our large cities. We wish Mr. Fanning every success in this pioneer branch of education. His terms are moderate—\$100 per annum—for instruction, board, and lodging.

**THE NORTHERN LIGHT**, devoted to free discussion, and to the diffusion of useful knowledge, miscellaneous literature, and general intelligence, published monthly, at No. 20 Market street, Albany, 16 pages, quarto, price One dollar a year, edited by John A. Dix, and assisted by an association of gentlemen. We are just in receipt of the 9 Nos. of Vol. 2, of this excellent periodical. Its papers, generally, are of a high order, and as agriculture is among its themes, we commend it to the public. The price is so low that we think no one can refuse to subscribe.

**THE FARMERS' REGISTER**, new series, Edited by Thomas S. Pleasants, and published monthly at Petersburg, Virginia, at Five Dollars a year in advance, 64 pages, double Royal Octavo columns. It will be seen by the above, that this sterling agricultural periodical has changed hands, and that Edmund Ruffin, Esq., its hitherto able and indefatigable editor, retires.

We deeply regret this, but understand that Mr. Ruffin's services will not be lost to the agricultural community by this step, as the state of South Carolina has appointed him as their Agricultural Surveyor, an office that his talents and acquirements peculiarly fit him to fill ably and well. We have always entertained a very high opinion of Mr. Ruffin, ever since we read his "Essay on Calcareous Manures," a work of which it was remarked to us by a distinguished gentleman in Kentucky, "had staid emigration, in a great measure, from Virginia, and revolutionised its system of agriculture on the tide waters." This is high praise, yet we have no doubt it is justly merited.

We have had time to read but a few of the articles of the January No., issued by Mr. Pleasants, but those speak well of his ability in his new vocation. We tender him our best wishes of success.

**THE ALBANY CULTIVATOR.**—This valuable paper entered on its 10th Vol. in January, and the two first Nos. at hand are filled with its accustomed able, varied, and useful matter. The January No. has a fine large portrait on a distinct quarto sheet, of Mr. Prentice's Fairfax, for some account of whom, see our February No. The Cultivator has been so long and favorably known by the public, that it requires no praise of ours. Previous to commencing this paper, it was the one to which we were in the habit of contributing most. It is issued monthly at Albany, this State, in a large quarto form of 16 pages, and is embellished with numerous engravings, at One Dollar a year. Messrs Gaylord and Tucker, editors.

**THE BOSTON CULTIVATOR.**—Otis Brewer, publisher, 91 Washington street, a weekly folio, of 8 pages, devoted to agriculture and miscellaneous news, price Two Dollars a year, in advance. We are in receipt of the first Nos. of this excellent paper, for vol 5th, and think well of them, and not the less, perhaps, on account of the editor being an *enlightened* Durham man. He seems to have some fancy for choice animals, and each No. of his paper gives excellent portraits of them.

**THE BOSTON TRAVELER**, in large newspaper form, is published semi-weekly at Four Dollars a year, in advance, by R. L. Porter & Co., 47 Court street. By the 6th No. at hand, we perceive that Mr. H. C. Merriam, the late spirited editor of the Cultivator, has become the presiding genius over the Traveler's columns. The Agricultural Meetings at the State House, are

particularly well reported in the *Traveler*, and its contents otherwise are varied and interesting.

**THE MAINE FARMER AND MECHANICS' ADVOCATE**, has entered upon its 2d vol., of a new series. This is in large newspaper form, and to agriculture and mechanics, it unites miscellaneous news. It is published weekly by William Noyes, at Two Dollars a year, payable in advance, Dr. E. Holmes, editor, and is one of the best and most spirited papers of the kind, with which we exchange.

**THE SOUTHERN PLANTER**, published monthly at Richmond, Virginia, edited by C. T. Botts and L. M. Burfoot, at One Dollar a year, in advance, 24 pages double columns, Royal octavo, embellished with engravings. This excellent paper with its handsome cover, is got up in rather neater style than any other agricultural publication at the south, and we are glad to see it entering upon its 3d vol. with so much success. We should suppose its price would ensure it a large circulation, but in addition to this, it is well filled with good practical original and selected matter.

**ANOTHER SOUTHERN PLANTER** is just started at Augusta, Georgia, at the same price as the above, but we understand that the editors did not know that the Old Virginian had taken the field before them, or they would not have come in thus unceremoniously for his cognomen. It is the intention of Messrs. Jones to change the name in the 2d No. which, when we receive, we shall announce in due form. We don't know but Messrs. Botts and Burfoot will begin to suspect that there is a conspiracy on foot to drive them off the field, since this is the second time that their name is assumed. It is doubtless somewhat provoking, but we could not resist a smile, when we first *unbagged* this third Dromio. We hope all new comers will be kind enough to let us alone.

**CENTRAL NEW YORK FARMER.**—The 2d vol. of this paper comes out in an enlarged size, having assumed the quarto form. It is a monthly of 16 pages, embellished with engravings, published at Rome, this state, at Fifty Cents a year, and is edited by Messrs. Johnston & Comstock. This paper is eminently practical, and calculated to do great good among our farmers. We have but one objection to it, and that is the price, it ought to be as high as One Dollar, to afford its proprietor a fair remuneration. We know, however, that there are many who will take a fifty cent paper, who who would not subscribe for a dollar one, and perhaps it is no more than right that the views of such persons should be met, if they can be consistently.

**THE BRITISH AMERICAN CULTIVATOR.**—This also has entered upon its 2d vol., is a quarto of 16 pages, published monthly, by W. G. Edmunson, at Toronto, Upper Canada, at One Dollar a year, edited by Wm. Evans, and a capital periodical it is too, and of a high tone, and well calculated to improve the farming community where it is published. We hope that every emigrant who comes into that fine province, will be a subscriber to the *Cultivator*, for a most excellent manual he will find it, in a land whose crops, and climate, and system of agriculture, are so different from that of Great Britain.

**THE COLONIAL FARMER.**—This is an octavo with wide double columns of 8 pages, published monthly, by R. Nugent, at Halifax, Nova Scotia, at Five Shillings a year, and is edited by Titus Smith. We are in receipt of No. 1, of the 2d vol. of the *Farmer*, and we

perceive that it is pushing ahead in the true spirit. Its original and selected matter is capital.

Our readers will perceive by the above notices, that the agricultural periodicals of the country are determined to persevere in their praiseworthy efforts to exalt and instruct the farming community, and it will be a burning shame if they are not well supported. If one-hundredth part of the money now spent in rabid politics and sentimental nonsense, which injure and debase the mind rather than do it any good, was turned to the support of agriculture, it would prove a great blessing to our country. The above are such papers only as have commenced or continued their career since January. All new volumes or new papers for the ensuing year, will be noticed by us in the same full and liberal manner as fast as commenced, and may they all live and flourish—enlighten and instruct that worthy class of people, for which they are especially designed.

**A POPULAR TREATISE ON VEGETABLE PHYSIOLOGY**, published under the auspices of the Society for the Promotion of Popular Instruction, with numerous cuts, 301 pages, octavo. From the cursory perusal given to this, we think it all its title indicates, and the best work for the general reader on the subject of Vegetable Physiology, that we have yet met, and as such, we recommend it to the public.

**A POPULAR TREATISE ON AGRICULTURAL CHEMISTRY**, intended for the use of the practical farmer, by Charles Squarry, 154 pages, octavo. We have shown our opinion of this work, by frequently quoting from it in the back numbers of this paper, and it may be sufficient for us to add here, that we think it one of the most valuable re-publications from the English press lately issued. It has the merit also, of being written in as plain and familiar a style as it is possible to treat such subjects. The two works above are published by Lea & Blanchard, Philadelphia.

**THE BIBLE IN SPAIN**, BY THE REV. GEORGE BORROW.—We are greatly mistaken if this work does not have a large sale, for it is the most original, picturesque, and deeply absorbing book of travels which we have read for many years. We had marked some extracts on Spanish stock and agriculture for insertion, but they are crowded out for want of space. We are favored by two editions of this work. One beautifully got up, of 232 pages, Royal octavo, double columns, price Fifty Cents, by Saxton & Miles, 205 Broadway; and another of 110 pages, by J. Winchester, 30 Ann street, in form of an extra *New World*, price Twenty-five Cents. The public must be fastidious not to be well suited with either of these handsome editions of the popular Mr. Borrow.

#### EUROPEAN AGRICULTURAL TOUR AND SURVEY.

Several gentlemen interested in the advancement of agricultural science and improvement, and of rural education, have proposed to Mr. Henry Colman, late Commissioner of Agricultural Survey of Massachusetts, to visit Europe for these objects. The plan is for him to spend a year in England, in the examination of the Husbandry and Rural Economy of that country; and a year on the continent, in the examination of French, Flemish, Swiss, and German Husbandry, and especially the Agricultural or Manual Labor Schools and the Experimental Farms.

It is thought that such an examination, as yet never undertaken by an American, might, if well conducted, essentially conduce to the advancement of agricultural knowledge and improvement in this country, and es-



pecially serve the cause of rural and practical education, which is now exciting great interest throughout the United States. The general plan of the survey will conform to Mr. Colman's Survey of the Agriculture of Massachusetts.

It is proposed to publish his reports in successive numbers. The first number is expected to appear by the 1st of January, 1844, and sooner if practicable. The rest of the numbers will follow in convenient succession, at intervals of two or three months.

The whole work will be comprised in eight, or at most ten numbers, of at least 100 pages each, handsomely printed in an octavo form, stitched and covered, and embellished with all necessary and useful drawings and engravings, title pages and index.

The cost will be 50 cents each number to subscribers. Gentlemen who subscribe are understood as subscribing for the whole work.

As the enterprise involves of necessity a large expense, it is expected that one dollar per copy will be paid on subscribing; or otherwise, one dollar on the delivery of the first number; one on the delivery of the second number; one on the delivery of the fifth number; one on the delivery of the seventh number; and one on the delivery of the ninth number, should the work be extended to ten numbers.

The subscriber has already the promise from many friends, of letters of introduction to their friends in England or on the Continent; and he begs leave to say, that he shall feel himself particularly honored and obliged by any letters of introduction to any gentleman who would welcome his mission or in any way assist its objects, or otherwise render him any office of civility or kindness. His objects being wholly public, he will anxiously avail himself of every advantage and facility of intercourse and observation with intelligent and respectable persons abroad.

HENRY COLMAN.

Rochester, January 2, 1843.

#### AGRICULTURAL SOCIETIES.

*Annual Fair of the Planter's Club at Hancock.*—We observe, from the Georgia Journal, that this spirited society held its annual meeting at Sparta, on the 4th of Nov. The first articles exhibited for premiums were by the ladies, more than twenty of whom we find among the competitors. Mr. Thomas Neal took the first premium on horses, and Col. John Bonner received those on swine, and a Durham bull. The first prize boar was Rip Vanwinkle, bred by Mr. C. N. Bement, of Albany, and the same that took the first premium at our own State show at Syracuse, Sept., 1841. The first prize for sows was divided between Nonsuch, bred by Mr. Bement, and the Flower of Orange, bred by Messrs. A. & G. Brentnall, of Orange co., this State. Mr. Grimes took the first premium on Durham cows, and Capt. R. S. Hardwick on South Down sheep. These were purchased of Mr. Bement. The address was by Judge Garnett Andrews, and is one of the best we have read this season. We make two extracts, one upon the utility of "book farming," and another on the advantages of agricultural associations.

"For my own part, I have accidentally picked up some scraps of book farming, which have been as useful as any other knowledge acquired from the same source, with so little trouble. By this means I learned that the sap *ascended in the wood*, became elaborated in the leaves and *descended in the bark* of the tree. This knowledge enabled me to correct some very fatal errors in budding fruit trees. It explains to us why corn is

so seriously injured by topping before entirely ripe. Until I received the knowledge from books, *I had lost one half the good effect of my manure* by keeping it off the field until *after it had fermented or rotted*, according to the advice of old practical farmers who held in contempt all book farming.

"I think our club is taking one step towards this consummation, so devoutly to be wished. Its tendency is to give our citizens some other excitement, some other pleasure, more substantial, rational, and patriotic, than have ever been accorded to political ambition. The time is coming, nay, now is, when the names of such men as Sir John Sinclair, Sprengel, Arthur Young, Chaptal, Leibeg, Buel, and Garnett, shall stand above those of warriors and statesmen. Thousands yet unborn shall rise up and call them blessed. We look, and well may we look, to our husbandmen for the cultivation of a high moral sense, whose fruits shall redound to the honor and glory of our country. We are, perhaps, nine-tenths of the population, and what we will we can do. How vast then the responsibility that we will correctly!"

**GEOLOGICAL SURVEY.**—We see that the lower House in Arkansas, has passed a bill authorizing a geological survey of the State. We trust that it will become a law, for nothing can be more beneficial to our country than such surveys; and they have never failed, we believe, in discovering treasures before unknown or scarcely dreamed of.

**SUPERIOR SEEDLING GRAPE.**—The Worcester Spy says, that a gentleman in the vicinity has raised a new seedling grape, probably a hybrid between the Sweet-water and Isabella. Its qualities resemble the Sweet-water, being tender, sweet, and juicy, without any hard pulp about the seeds. It is a good bearer, and stands the climate of Massachusetts well. Its fruit ripened six weeks earlier than the Isabella, and continued on the vines till November. We should be obliged to the editor of the Spy if he could procure us some cuttings.

#### RURAL ARCHITECTURE.

We are rejoiced to see in the vicinity of this city, and especially upon the banks of the Hudson river, that a new style of architecture within the past few years has been gradually coming into vogue. Our citizens and farmers are just beginning to learn, that shingle palaces, and Greek temples in wood, with pillars like a crane's legs, supporting a portico something like the head of a huge catipult, are neither comfortable nor in good taste; and now they are looking about a little, to ascertain what they can substitute for them. For our own part, we know nothing equal to English cottages, in the Gothic, Tudor, and Orné styles. There is something so quiet and home-like—so rural and varied—so picturesque and truly comfortable in them, that it has been a perfect wonder, considering our English origin, that they have not taken precedence in American architecture, from the first settlement of the country. Yet instead of this, they have been almost entirely rejected, and the smart Jonathan, when he became of age and set up for him-

self, would have none of what he termed the "homeliness of his sire," and sought out other inventions more consonant to his ambitious fancy for display. But he has got older now, and as he begins to rejoice in the more sedate appellation of Uncle Sam, we think he is growing wiser, and caring less for tinsel and show, and more for an appropriate fitness of things and substantial comfort.

It is our purpose hereafter, to give sketches occasionally in this work, of such buildings as we think most appropriate for the farmer, and as an example of one of the more humble kind, we here introduce the cottage of Elstow, where the celebrated author of *Pilgrim's Progress*, John Bunyan, was born, and to add to the interest of the engraving, we subjoin a fac simile of his hand writing and signature.

COTTAGE OF JOHN BUNYAN.—(FIG. 40.)



CHIROGRAPHY OF JOHN BUNYAN.

*Man is and stout and strong in deed  
 He doth not waver like as doth. Rest  
 "Sighs he gives them good loss of all  
 That are abundant to the heavenly call*

AUTOGRAPH OF JOHN BUNYAN.

**JOHN: BUNYAN**

For these rare engravings we are indebted to the same gentleman, the Rev. J. O. Choules, who furnished us with the curious work of Barnabe Googe, Esq., whom we took the liberty of introducing to our readers in the October and November Nos. of our paper, and we declare, had we not been informed,

that this cottage was Bunyan's, we should have set it down at once as the home of the author of the "*Foore Bookes of Husbandrie*." For see what a sequestered retreat it is, and how charmingly embowered in trees. These are the places to talk upon farming, and we will venture to say, that had



not an odious tyranny dragged Bunyan away from this ancient spot, instead of writing a "Pilgrim's Progress," he would have given us a work almost as immortal on Husbandry; for how often rural subjects and images abound in this singular production. We hear talk of flocks and herds, gardens and flowers, fields of wheat and corn, ground well sowed and tilled, muck and manure; and as we wander on we are carried over By-path meadow, cross the valley of Humiliation, wade through the slough of Despond, rest in an arbor on the hill of Difficulty, and after the still more fatiguing ascent of the Delectable Mountains, are regaled in orchards and vineyards, and sip at the coolest and most delightful of fountains. Yes, we repeat, if John Bunyan had not been a preacher and author, he certainly must have become a farmer.

### Original Correspondence.

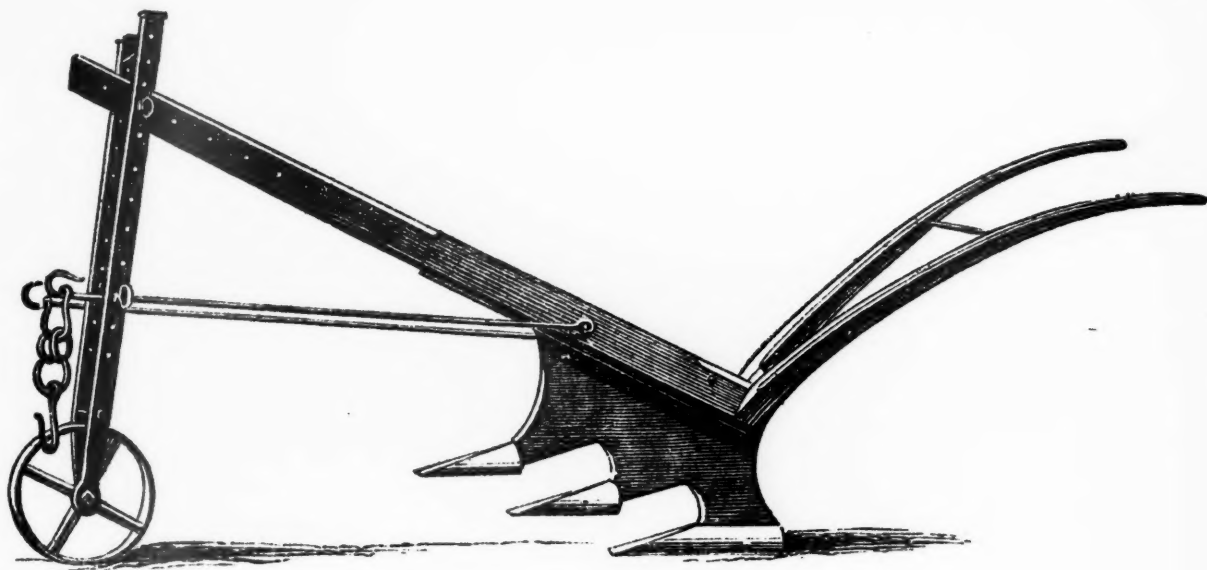
#### SUB-SOIL PLOWS.

##### BARNABY AND MOOER'S SIDE-HILL PLOWS.

When we were in England we devoted some time to the examination of sub-soil

plows, but all we saw there we thought entirely too expensive, and so heavy that it required from three to four pair of strong horses to move them. This we knew would never answer with American farmers, and since our return we have suggested several models to our mechanics, but have never been able to get anything promising to combine cheapness, strength, and good work so effectually, as the sketch which Mr. Cornell was so obliging as to make for us one day as he called at our office, on his way south from Ithica.

As to Barnaby and Mooer's side-hill plows, we agree with Mr. Cornell in saying that it is the very best known for this purpose, and we have seen it do excellent work on level land. We are of opinion that it will answer an admirable purpose in the washy lands of the south, especially in what they call "horizontal" plowing, and we have sent several out to our friends there for trial, and if they prove successful, we have no doubt that they will soon be more generally used in that quarter than any other. But before introducing Mr. Cornell's letter, we give the engraving of one of the best kinds of English



ENGLISH SUB-SOIL PLOW.—(FIG. 41.)

*For the American Agriculturist.*

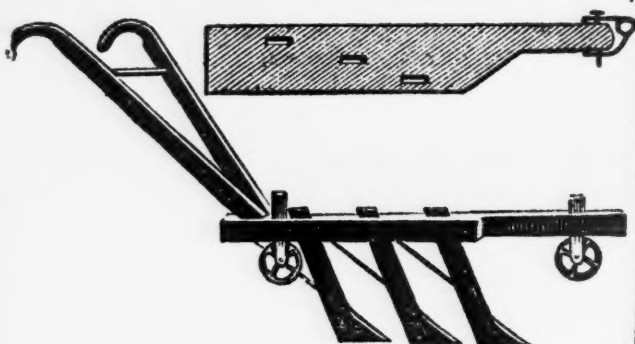
*New York, Feb., 1843.*

sub-soil plows that we know of. We copy it from the London New Farmers' Journal, of December, and believe it is a recent invention. Its construction is so easily made out from the engraving, that we give no explanation of its different parts. In some soils we should think this plow would work well.

MESSRS. A. B. & R. L. ALLEN:

Having become satisfied of the utility of sub-soil plowing, and equally well satisfied that the heavy, ungainly English plow, hitherto introduced into this country, is not well adapted for the purposes of the American farmers, I herewith give you a rough sketch of a sub-soil plow, that I think will perform the office of loosening the sub-soil in a better manner than

any with which I am acquainted. It consists of three coulter set in a beam, one 12 inches in advance of the other, and varying 4 inches from a right line, as is seen by the mortices in the top view of the beam, in the sketch.

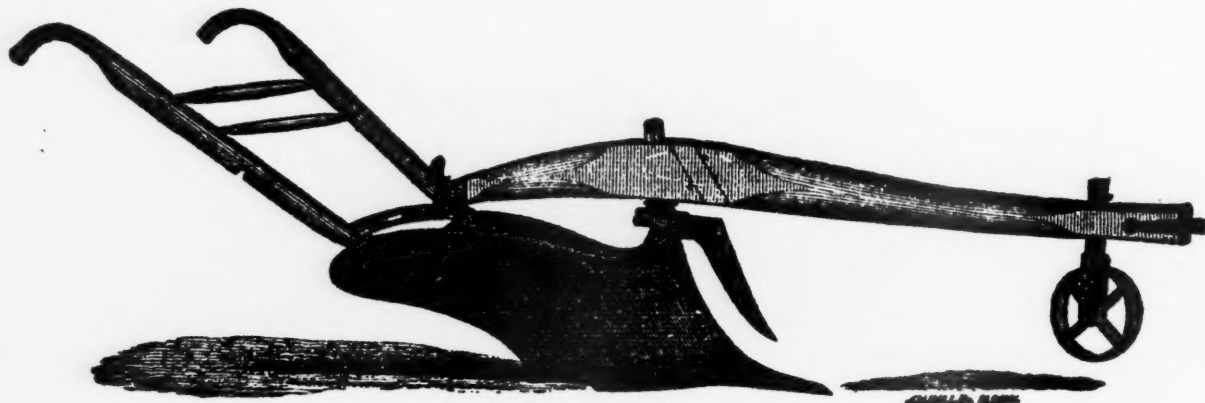


SUB-SOIL PLOW.—(FIG. 42.)

will work best to follow in the furrow of the common plow, cutting a 12 inch furrow. It may be guag-

ed to a suitable depth by raising or lowering the wheel. The clevis should be so arranged that the line of draught will be in line with the left side of the beam, which will allow the plow to keep its place in the furrow, when the team follows the furrow of the surface soil plow. The manner in which the coulter are set, will prevent clogging, and assist in the performance of the work, as each coultter has a slice of 4 inches only to pare off or loosen, in most soils. One pair of horses would be team enough to plow 6 or 8 inches deep, with the above plow. If you have one team with the surface soil plow working 7 inches deep, and one on the sub-soil plow working 8 inches, this would stir the ground to the depth of 15 inches. Where it is desirable to go deeper, I would plow 8, 9, or 10 inches deep with the surface soil plow, and the same depth with the sub-soil plow.

The coulter are made of wrought iron, with steel points, and when they become dull they can be taken out and sharpened by any blacksmith that can shoe a horse. The price of a sub-soil plow, with three teeth, as above, would be about \$10, one with four teeth, \$12. While on the subject of Plows, permit me to describe some of the peculiarities of Barnaby and Mooer's Plow, and explain the difficulties that attend its intro-



BARNABY AND MOOER'S SIDE HILL PLOW.—(FIG. 43.)

duction among the farmers as a level land plow; it is conceded by all to be the best side hill plow ever invented, they are as follows:

The plow having two mould boards, so arranged as to act as a right or left hand plow, it necessarily follows, that one mould board must perform the office of a land side, while the other acts as a mould board. Either mouldboard is so constructed that a line drawn through any part of it, parallel to the surface of the earth, is straight; when the beam, therefore, is thrown over to the left hand side of the plow, it forms a land side of the left hand mould board, and a line drawn parallel to the earth through the said land side, at any point as deep as it goes in the ground, say from one to two inches is a straight line, and parallel with the beam of the plow, and in line with the furrow. But a line drawn at right angles with the above line, or perpendicular with the earth through the mould board would be a curved line; consequently the land side of this plow is left round on the land edge of the furrow, instead of square and perpendicular, as is the case on the land side of the common plow, and hence arises the difficulty that some have complained of in holding this plow on level land. The difficulty is in the plowman, and not in the plow. The plowman strives to hold the plow upright, as he is used to do with the common plow, whereas, its peculiar shape inclines to cant a lit-

tle to the left hand, when it throws the furrow to the right hand, and to the right hand when it throws the furrow to the left hand. If the plow is suffered to run in a natural position, it will be found to be an easy plow to manage. In fact I have known it to run 40 rods without holding or touching, turning a handsome furrow the whole distance. On a side hill there is less inclination to cant over, as the land side of the field is the highest, and the furrow rolls from the plow with less resistance. Another difficulty has been in putting the plow in the hands of the farmer without being scoured, in which case it is not surprising that, after trying the plow, he should condemn it, and throw it aside before the sand coat is worn off the castings. That difficulty should be removed by the manufacturer in grinding the castings before they leave the shop. The above difficulties have essentially retarded the introduction of the plow, but I am satisfied, from a practical acquaintance with the best plows in use, that no plow has yet been invented that can compete with this for any length of time, as a plow for general use. Its ease of draught and its adaptation to every kind and shape of plowing, and the perfect manner in which it performs its work, are advantages that cannot be combined in any other plow.

Yours, &c.

E. CORNELL.



For the *American Agriculturist*.  
**CONE'S DYNAMOMETER.**

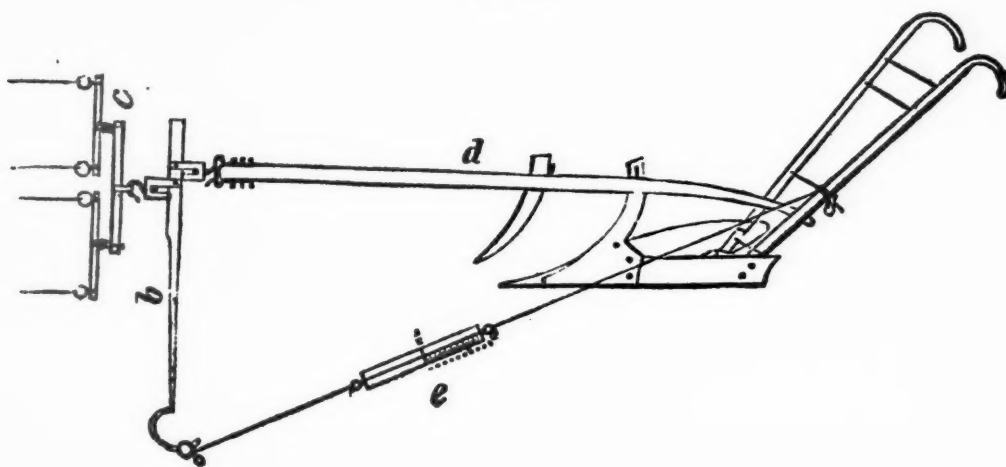
BATAVIA, Jan. 24, 1843.

Messrs. A. B. & R. L. ALLEN:—

I acknowledge the receipt of the January No. of the *American Agriculturist*, in which you have pleased

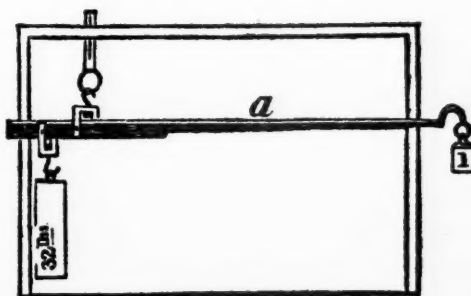
to notice an invention of mine, in a Dynamometer, through my friend T. C. Peters, whose name is familiar among the agricultural community; and as he has omitted some of the minutiae attending it, I send enclosed a drawing, which has the explanation on its margin, which cannot but be perfectly clear to you.

FIG 28.



**EXPLANATION.**

Let *a* be Dynamometer Beam, with 32 lbs. on weighing hook, and one lb. weight at the end of beam, which exactly balance each other; then hitch beam to plow, which call *b*; then draw *e* versus *c*, so as to draw plow *d* along, the force draws out index to spiral balance to 7 lbs., which multiplied by 32=224, the force exerted to draw plow, except 7 lbs., which  $\div 224=231$  lbs., as you see the cord hitched to end of beam draws 7 lbs., which is plain, and proves the problem, Q. E. D.



You will see that Mr. Peters omitted to mention, and to add in the force exerted on the small scale, which is a trifling omission; but when mathematicians come to examine a sum, it must prove. Thus, for example: When plowing beam *b*, draws out spiral balance index to 7 lbs., the  $7 \times 32=224$ , this, according to former statements, would be the draft of the Plow; but then what shall we do with the force that draws out the Index? Why, of course, add that, which is 7 lbs., to 224, and the aggregate would be 231 lbs., which is exact, and reduced to a mathematical fact, which can in no case be gainsayed. Or, should the force exerted draw out Index to 16 lbs., then multiply 16 by 32=512 lbs., to which also add 16, makes 528 lbs., the force exerted, which you will discover at once as being correct and simple.

It is a notorious fact, that even the plows now in use in this favored section of the world, where nearly all plow for a living, there is a difference in the ease of draft from 20 even to 100 per cent.; and yet we have a large number of seemingly intelligent farmers, who now actually sneer at such inventions, saying, "they want no book-farming, and that they can tell when a plow suits them better than any one else." Such men I am willing should tread in the footsteps of their great great, great, grandfathers, if they choose; but if I am to plow for a living, I am willing to use a plow that will draw as easy with one horse, as some others in use will with two. Yet, after all, the march of agricultural improvement is onward; and when farmers come to see science and practice combined, and thousands upon thousands have seen and are seeing

this, they then heartily appreciate anything that tends towards advancement in their cause, and become co-workers therein.

Mr. Peters suggests the idea, that the Dynamometer should stand and work perpendicularly, to which I must most respectfully beg leave to dissent, for the following reasons:

When plowing, the plowman should have nothing to impede his view of his horses, so that he can keep his plow perpendicular, and his horses horizontally straight, so that the plow shall work even, and cut the same furrow slice. It is a great objection to all Dynamometers I have ever seen, being hitched immediately behind the team; for the inspectors are then obliged to be trotting along immediately under the horses tails, and are consequently always more or less apt to err in their observations, from this and various other reasons. Again. Should my Dynamometer work perpendicularly, you would have to be right over the beam of the plow, and in front of the plowman. It may be said that the plowman might make the observations; but this should not be, as it requires all his skill to keep the plow and team as direct as possible. Whereas, on the other hand, when the beam comes out on the land side, you have all the chance to note oscillations, and come to a correct conclusion, as you are entirely out of the way of plowman and team, and have a good chance for walking without any impediments. There is no difficulty to be apprehended from the beam coming to the ground, for the moment you start your team, you may place your Dynamometer beam in such position as you please, and it will keep that position without any trouble.

In your remarks upon the State Fair, I coincide with you, except in relation to the time of holding that Fair. Would it not be better to have the Fair come about the 10th or 15th of September? Then the farmers of Western New-York are more at leisure than in the first week of that month, for you know they must attend to getting their wheat in at any rate, as that is all that can be grown in our section of the country, to raise cash; and nearly all the wheat sowed in western New York is sown in the first week of September.

I am making preparations to have my improvement uniform throughout the union, and an exclusive property in the same.

I am cordially yours,

THE INVENTOR.

*For the American Agriculturist.*

#### SHEEP HUSBANDRY, NO. 1.

MESSRS. A. B. & R. L. ALLEN:—

DEAR SIRs:—From the commencement of your publication, I have watched its development and progress, not only with great interest, but also with much gratification. I have been especially gratified by seeing the National character of your work; for it has been *American* in fact as well as in name. This, one of its chief characteristics, I hope will be continued; for though we had before no lack of agricultural periodicals of a local character, good and highly useful ones too, yet we needed at least one publication at some central point, of a somewhat different order; one which should be comprehensive and national in its scope, and as broad in its views as the whole of our extensive and growing country.

I well know that there were those, who objected to and decried the attempt to establish your work on such a foundation, and who thought its chance of success would be diminished by aiming at anything beyond the usual local character, of the hitherto most successful agricultural newspapers and magazines of the United States, but I trust you will live to demonstrate the fallacy of such narrow views. Allow me to offer my congratulations on the progress you have already made, and in the name of many of your readers and friends, to wish you the best success in a long career of extended usefulness.

It has struck me, that giving your publication a National aspect, your very location at a commanding point of the North, would enable you, in many respects, to be still more highly useful to the Southern and South-western portions of our country, than if you were established among them.

There are many things in Agricultural and Domestic Economy, if not in Political Economy, which have hitherto been better understood and practiced at the north than in the

more southern states of the Union. Especially has this been the case in the New England states, owing doubtless, somewhat to the nature of their country and soil, but more to the character of their people. Those of them engaged in agriculture, have long understood and practiced the doctrine of making the farm and their own domestic labor, produce them as far as possible, all the necessities of life, their clothing as well as food, so as to buy but little, and thus pay out as little money as possible; and the extent to which they have succeeded in this, would be matter of wonder and surprise to those who are unaccustomed to witness it; many wealthy and respectable families coming very near the mark, of "living within themselves,"—perhaps quite as near as is desirable. In this *frugality*, has lain the true secret of their superior success and real independence, and their general freedom from debt and embarrassment in these times of universal difficulty and depression. These means and elements of independence, are to a considerable extent, worthy of *transplantation* to the southern and south-western portion of our country, where in some things, as I will presently explain, they will admit of a ready adaptation, on a more extended scale.

I notice that the south is apparently waking up somewhat, to the great importance of this subject, and I am disposed to give you credit for some instrumentality in drawing attention to it. Instead of devoting their whole strength as heretofore, to the production of some one great staple, cotton for example, which is liable to failure of crop, and at times to great depression of price in market, they are now learning that it is best to raise their own *corn* and *pork*, as well as other provisions, and as far as practicable, to produce within themselves, clothing for their laborers and families, instead of buying and paying out money for everything they consume. In proportion as they succeed in putting this in practice, will be their independence and permanent prosperity.

In natural connection with this subject, it has appeared to me that the south and west would be great gainers by the introduction of some new staples of an extensive and permanently important character, adapted to their soils and climate.

More desirable than ever, does this seem at the present time, when almost all our products are so exceedingly depressed in price, as scarcely to remunerate the cost of production, after deducting the expense of transportation to market. The article of silk has



been named, and much discussed. While I do not doubt that it is destined to become, at no distant day, an important production of all parts of the United States, I leave it to be dealt with by those who are better informed and more competent to the task of explaining its cultivation than myself. But I have another article in view, not in any degree speculative nor of doubtful success, which rightly managed, is capable of becoming a *mine of wealth* to large portions of the south and west, and it is capable too, of immediate introduction; indeed never before could it have been done so cheaply and advantageously as now. I have reference to the extensive introduction of SHEEP, the production of wool of the higher grades of quality, an article which will never go out of fashion, which will better, beyond all comparison better, than any other product except silk, bear the cost of transportation to market, and which will always, like cotton, command a ready sale to any extent. It can be put in bags and transported to market by land and water, as easily and about as cheaply per pound as cotton, while its value in market will be at least five or six times as great.

One word as to the adaptation of the climate and soil of the southern and western country for sheep. On this subject there formerly prevailed considerable misconception, and still does to some extent, in part the offspring of *interest*, but far more from real ignorance in regard to it.

I was myself taught to believe that the *home*, the natural country for fine woolled sheep, was an extreme cold northern climate, where winter reigns half or three-quarters of the year, Vermont, for instance; and that they would not thrive, and that their fine wool would turn to *hair*, &c. &c., in our country south of a certain latitude; the southwardly part of Connecticut, I think, was where the imaginary south line was drawn; and being in my childhood more fond of sheep than I was of cold weather, I used in my simplicity to be afraid that they might not do well so far south in our country, as where I might choose to pitch my tent for life. But I have lived to become satisfied that those fears were wholly groundless, and that so far from New England and the north being the *only* portion of our country adapted to the growth of fine wool, that there are other portions of the United States, large and extensive tracts at the south and west, which are not only as well, but in truth, far better adapted in all important respects, to the suc-

cessful and profitable production of fine wool. But enough, you will say, for this time. In my next, we will, if you please, consider and discuss the subject of what part of the United States is best adapted for profitable sheep-farming—also if we have then time and space for it, the question, what kind of sheep are best calculated for that object.

In the mean time,

Believe me very truly yours,

February 3d, 1843.

AMERICUS.

When we wrote the article on Crops for Soiling, in the February No. of the American Agriculturist, we were well aware of the merits of Lucern, as we had ourselves cultivated it several years in succession, although under somewhat unfavorable circumstances; and aside from this, we had repeatedly seen it growing in different parts of our country, and in Europe. In taking up the pen we intended to be very brief, and point out such crops only as could be *generally* cultivated in the country. It will be seen that our correspondent himself acknowledges that lucern requires a peculiar soil in order to flourish well, and that much care and attention must be devoted to it the first year of its growth; for these reasons we cannot agree with him when he says, that lucern is to be preferred to rye and corn, except, perhaps, (and even here we have our doubts,) in those localities which abound in the driest, deepest, richest, and most friable loams. And when we say *friable loams*, we mean those of which sand is the almost exclusive ingredient of the composition; for what is called a friable loam at the west, where some clay is mingled with it, our friends there informed us they found totally unfit for lucern; but corn, rye, wheat, and the clovers flourished in it admirably.

Although we are not precisely agreed as to the full merits of lucern, we are not the less obliged to our correspondent for his excellent communication. We esteem lucern a valuable adjunct in soiling, and are glad that he has directed attention to it; and if he will add still further to our obligations by giving us his name, we shall do ourselves the pleasure of calling upon him when spring is further advanced, and have a discussion in the very fields themselves; and if they do not in their luxuriant growth of vegetation, make a pretty strong argument on their own account, all is we shall be greatly disappointed. Will our correspondent try one acre of our recommendation of soiling, along-side of an acre of his own, and see which pays

the best? If he will, and give us the result of the experiment, we hereby promise to do him an especial favor in return for his trouble; and we think this would be the only true way of deciding the question of lucern *versus* corn, rye, wheat, clover, &c.

*For the American Agriculturist.*

#### LUCERN FOR SOILING.—SUGAR BEET.

*Flushing, Queen's Co., Feb. 10, 1843.*

MESSRS. A. B. & R. L. ALLEN:—

I noticed in the last number of your paper, an article on the cultivation of rye, vetches, peas, and corn, sown broadcast and cutting them for soiling stock. Now I should much prefer lucern to any of these, for an acre of it will keep five cows from the middle of May to the middle of October, if cut and given them when green, and it may be cut five times for soiling, and three times for hay during the summer. It will produce three tons of hay to the acre the first cutting, and one and a half tons each succeeding cutting.

It flourishes most luxuriantly in deep, rich, friable loams, though it will also thrive in any good, dry soil; but the land must be kept as free as possible from weeds, otherwise its growth will be greatly impeded. No land is too rich for it, and the soil must be deep and dry, otherwise it is useless to attempt to grow lucern. The potatoe crop heavily dressed with long manure is a good preparation for it, and the ground should be plowed as deeply as possible, as it is a tap-rooted plant, and in a loose sandy soil the roots have been known to run to the depth of 4 feet; the seed should be sown from the 1st to the 15th of May. It may be sown on a crop of wheat, rye, or barley; twenty pounds of seed should be allowed to the acre, be put in with a light harrow, and the operation finished with the roller. The ground should be harrowed every spring to destroy grass and weeds, and occasionally top-dressed with bone dust, ashes, or rotted manure, as best suits the convenience of the farmer. It is an excellent food for horses and cows whether in a dry or green state; and when well laid down and properly attended to, it will last ten years. It is quite as hardy as red clover, and much more valuable.

I have raised the sugar beet for several years and think them very valuable food for stock, milch cows particularly, making them give an abundance of the richest milk, quite equal to that produced from grass; they are also very good for hogs. I have fed them to my breeding sows and store hogs, together with the wash of the kitchen, and they are now in as good order as any farmer need desire; but a Berkshire will get fat where a razor-back would starve.

Respectfully,

W.

*For the American Agriculturist.*

#### TOUR FROM NEW YORK TO MOUNT VERNON.

In going south from New York, one is sensibly struck with the apparent sterility of the soil of New Jersey, but by the recent discovery of extensive marl beds and shell lime, and their application in frequent instances upon its surface, it has been rendered quite productive. Its locality between the two great cities of New York and Philadelphia, gives it extraordinary advantages of market, and should stimulate its husbandmen to the highest cultivation of which the soil is capable. Fruits grow in great luxuriance, and are an important item of revenue; and probably the best peaches in America are produced in the extensive orchards of New Jersey. Twenty thousand dollars

have been received in one year from the orchard of a single proprietor. The Sweet or Carolina potatoe is also grown in considerable quantities for market, in addition to the ordinary farm productions of the northern states.

Reaching the Pennsylvania side of the Delaware, the soil is evidently of a much better quality, possessing more of a clayey sub-soil, and with good cultivation, it sustains a stronger and more durable vegetation on the surface, than do the sandy and thinner soils of the opposite state. Nothing can exceed the beauty of the highly cultivated farms for miles above and below, and west of Philadelphia. The buildings, composed of farm-houses, barns, and out-houses, constructed in many, and perhaps most cases, of durable stone, neatly whitewashed, and in systematic order, present a substantial, cheerful, and opulent features of this fine agricultural region. These farms are worth from one to two hundred dollars per acre, even to the extent of fifty miles into the interior of the counties of Berks and Lancaster.

LIME is the great basis of their manures in this region, and it is applied in no stinted quantity, as the exigencies of the land may require, from 50 to 150 bushels to the acre, once in eight, ten, or twelve years. This article costs from 10 to 30 cents per bushel upon the farm, as it may be more or less contiguous to the kilns and quarries. The cultivation between Philadelphia and Wilmington in Delaware is of a high order, and the country about the latter city is eminently beautiful. From thence, south to Baltimore, it gradually deteriorates, with a less capable soil; yet beautifully undulating in its surface, and abundantly susceptible of high cultivation, with a proper application to the soil of the muck beds that abound in the swamps and the almost inexhaustible lime quarries, and marl beds; to say nothing of the immense quantities of fish and shells that exist in the neighboring waters; no part of our country can be brought into a more productive condition than this. The climate for a great part of the year is delightful, and nowhere do fruits flourish more luxuriantly than in the region of the Delaware and Chesapeake bays; and agricultural capital judiciously expended, could in no place be more profitably employed.

NEIGHBORHOOD OF WASHINGTON.—Between Baltimore and Washington the same pleasing surface of country continues, possessing great agricultural capabilities, but under a long course of severe cropping in corn, wheat, and tobacco, years ago it became exhausted, and is now abandoned to utter desolation; and thousands of acres, as the traveler passes over the ancient corn and tobacco hills are visible, as yet hardly covered by a growth of feeble and sickly green herbage. There is certainly something wrong in all this, and with the ready and abundant markets afforded by the numerous seaports of the vicinity, it is a standing wonder, particularly to the passers by from the New England states, whose soil is naturally far inferior to this, why so much *capable* land is abandoned to utter waste and sterility. To the disgrace of our American enterprise the neighborhood of Washington has hardly any perceptible cultivation. Surrounded by an amphitheatre of hills nowhere surpassed in beauty and position, with an occasional exception it bears the same cheerless and dull monotony of negligence as the poorest soil in the land.

Can it be that the exciting, restless, political atmosphere of the seat of government withers all attempts at improving this otherwise charming country? I leave this for political economists to solve. But certain it is, that a more wretched agricultural neighborhood than



that of Washington does not exist in the United States, nor one where an intelligent and a high order of husbandry would find a more abundant reward. Shame on the sloth and ignorance that thus encircles the capital of our nation! Were I alone in this opinion, I should distrust my own judgment;—but on comparing notes with numerous strangers, members of Congress, and residents of many years in the city, I find that there is no mistake in the matter. It is, however, some relief to remark, that within the last ten years a few individuals of enterprise and foresight have purchased considerable tracts of land in the neighborhood, and have commenced an improved cultivation; and by the partial developments already made, are fully satisfied of the utility and profits of their investments. Lands well wooded, delightfully situated, possessing a naturally good soil, and requiring but the application of a correct mode of culture to make them equally valuable and productive to any farms in the country, may be bought within five to ten miles of the city of Washington for eight and ten dollars per acre! and within an hour's drive of perhaps the very best market in the country. Lime is abundant in the vicinity, and not a doubt can exist that with its aid the best results will follow. Look at the neighborhood of Boston, naturally one of the most sterile and forbidding soils to the agriculturist imaginable. Yet by a diligent cultivation, how productive—how beautiful! Yet far inferior in natural capabilities to that of Washington. But this state of things must change. The school-master in husbandry, as well as in political and moral science, is abroad, and all this salubrious region will ere long bear the print of his footsteps.

**A RIDE TO MOUNT VERNON.**—It was twenty-five years since I had seen the last residence of the Father of his country, and then when almost a boy. On a fine sunny May morning I embarked in the steamboat for Alexandria. On my way thither—an hour's sail on the Potomac, a truly noble and beautiful river, brought me to Alexandria, a sober-looking, well-built, and apparently declining city, of much note in the ancient days of Old Virginia. When I before visited Mount Vernon, it was occupied by the late Judge Washington, a nephew of the General, a most estimable man, but who paid little or no attention to agriculture, and barely kept the estate in repair, more perhaps from a pious feeling of veneration to the memory of his illustrious relative, than from any revenue that he derived from it.

I well remembered the feeling of surprise which almost overwhelmed me when in my youthful visit I first saw on the outskirts of the estate, its dilapidated fences; its stunted, straggling woodlands, its neglected cultivation, and its apparent poverty of soil. Yet as the last resting-place of the greatest man of his age, or of his country, it had become so hallowed in my early recollections, that, notwithstanding all these disappointments, when I approached the dwelling, after wandering a mile through a ruined old park, I was enraptured with the quiet beauty of the home grounds which enclose the ancient mansion, and gazed for hours from the charmingly forested lawn in front, which looks out for miles on the wide Potomac. Here too, was much good cultivation; orchards, fields of grain, meadows, and pastures lay about the domain, and the garden was richly stocked with rare and valuable plants, as well as the necessary family vegetables; while extensive green-houses displayed luxuriant varieties of exotic fruits, magnificent and beautiful flowers, and curious specimens of tropical plants. Soon after that period, Judge Washington ceased to exist, and the place passed into the hands of his nephew, the late John A. Washington of Upper

Virginia. But a very few years after removing to Mount Vernon, this amiable gentleman died, leaving a widow with a young family, and their household servants, the sole occupants of the estate. At the time of my visit they were absent, and I was told that the estate was now left in the possession of the eldest son of this family, yet quite a youth, and that the mother and her still young family were about returning to their old residence in the Shenandoah Valley.

From Alexandria to Mount Vernon, the country is finely cultivated for two or three miles out of town, but farther on, the farms become gradually more neglected, until for miles before Mount Vernon is reached, the country with an occasional exception is almost a monotonous waste. The Mount Vernon estate now comprises but a small part of the extensive domain which it embraced in the days of its illustrious proprietor, when it extended for several miles on the high road that passed along and back from the river. The once productive and well cultivated fields are now thrown open and abandoned, covered by a stunted growth of wild bushes, and straggling woods, washed by unsightly gullies; and after entering the once beautiful park which approaches the home grounds and mansion, the highway, for a mile, after passing the crumbling porter's lodge at the gate, is scarcely passable, so washed is its narrow carriage way by the rains and neglected water courses of nearly half a century. A few wretched cattle were picking a more wretched subsistence from the stunted broom grass that grew in neglected patches here and there, and a score or two of gaunt, long-tailed sheep were shifting as best they could for a scanty living, among the bushes and tangled briars which grew among the scattered wood, filling the mind with ideas of misery and utter desolation. What a contrast was this to the pictures of thrifty husbandry, comfort, and abundance, of which I had so often heard in my early years, and that existed in the days of its possession and cultivation by General Washington; reputed, as indeed he really was, one of the best and most skilful of managers! Passing on to the numerous buildings which once formed the family residence, the servants' lodges which skirt the road were in ruins. The green-houses had years ago been burned to the ground, and not even the shattered fragments removed. The walled terraces which skirted the high grounds where stands the old mansion were all tumbled into decay, and the old house itself stood in moaning desolation among the general ruin. Neglect and dilapidation stood out prominent as the reigning genius of the place, and I wandered about sorrowful and dejected at the mournful appearance of all around me. Immediately around the house itself were a few enclosures, but driven by the encroaching wild vines and brush-wood into a scanty and restricted compass. In these were some tolerable crops of young grain, and meadows, and pastures. The garden was supplied with a few vegetables for family use, and the once brave and luxuriant old orchard below the dwelling, was wild with straggling branches that years ago required the pruning knife; and the walls that enclosed it were almost hemmed in, and covered with an unsightly growth of noxious shrubbery and weeds. The old vault, where for many years lay the last remains of Washington, was fallen in and tenantless, and a new one of brick, and of respectable appearance and dimensions was built farther down the river, which now contains the remains of himself and family.

Were I here to indulge in a record of my sensations, while gazing on the marble sarcophagus which contained the remains of him who was "first in war, first in peace, and first in the hearts of his countrymen,"

I might perform a duty most grateful to my personal feelings, but foreign from the object of this letter, and out of place here; yet I could not but regret that a spot so holy as the last resting-place of Washington should be so utterly neglected, and the noble domain which his genius so well loved to cultivate, and on which for a long series of years he had given so shining an example of agricultural advancement to his countrymen, should thus be abandoned to ruin and decay. This to be sure, is no monumental country. History alone is to be the record of noble deeds and of great actions in our land, yet I felt sorrowful and cast down, that the supineness of his native state should permit the once highly cultivated and tasteful residence of her cherished son, to present so gloomy a shadow of its once luxuriant greatness.

Mount Vernon, and all the country on both sides the Potomac, is susceptible of great fertility by the application of active stimulants to its soil; and I devoutly trust that the time will arrive, when all this beautiful and most interesting region will again luxuriate in gladness, and become redolent with its fruitful fields, and teeming harvests, and superb flocks and herds.

L. F. ALLEN.

*For the American Agriculturist.*

#### SOUTHERN PRODUCTS.

*Mississippi City, 18th Jan., 1843.*

MESSRS. A. B. & R. L. ALLEN:

It always affords me great pleasure to communicate anything useful to the agricultural interests of this great Union. I only regret I am not capable of doing more to aid your virtuous and laudable undertaking, and more fully realize your expectations with regard to our productions. I am well aware that "the people of the North have strange conceptions of Southern capabilities, in an agricultural point of view." The reason of this is very evident. We have, it is true, many people from the North living in the South, many of whom are now planters; but we have very few who were raised farmers in the North. The Northern people who have come South, were everything and anything but farmers; priests, lawyers, doctors, mechanics, merchants, traders, pedlars, seamen, patent-right vendors, &c., &c., but no farmers; hence they do not enlighten the minds of their farming friends North, with regard to the agricultural resources of this country. True, they sometimes speak of large cotton or sugar estates, with large stocks of slaves to work them, with interesting descriptions of *certain rich widows, or planters' daughters of fortune*, and how successful trade has been in this, or other respects, with themselves or some of their friends. But this is a kind of information that your real honest, industrious, economical farmers rarely see and never heed; such stuff offers them no inducements; it is worthy only of the attention of professional gentry of every name and denomination.

I witnessed in the island of Cuba a striking evidence of some of the above facts. From Matanzas to Cardenas, decidedly one of the finest tracts of country I ever saw, in which are settled and engaged in planting, both sugar and cotton, many persons from our Northern States; every one of whom, so far as I could learn, (except one,) had either been raised merchants or seamen. The one raised a farmer in Maryland, had the finest and most profitable estate in the country. The Creole Spaniard pursues with great tenacity and reverence the unaltered course of his ancestors, and considers all improvements innovations. The American merchant, or ship Captain, when turning planter, must

pursue the same course as the Creole; because he knows nothing of agriculture himself, experimentally. The consequence is, no improvement is made by Northern men in Southern agriculture. But if we could start a company of your real sound, sensible, *practical* farmers, to our sunny shores, they would soon give you accounts of the agricultural capabilities of our country, as strange and astonishing to their friends left behind them, as the reality would be profitable and pleasing to them in their new homes. I would refer such as desire information on this subject, to Dr. S. A. Cartwright's truly valuable and interesting communication, published in the October No. of your paper, and some of my own opinions in the August No. of said work. My own experiments are very limited, but so far have proved very successful. The capacity of this country for raising grapes, equal to any other for making wine, is not now a doubtful question. Some of my vines yielded, last year, fifteen bushels of grapes to the vine; and not one less than three bushels from cuttings planted in January, 1839. I think that the successful cultivation of the olive, for making oil and pickles, may be carried on to any extent; and a successful competition with any other country may now be regarded as certain, from the experiments of Mr. Debays, at Biloxi, ten miles east of this.

I have now a few fine apples and pears raised near here this year. The quince, peach, nectarine, apricot, plumb, (all kinds) pomegranate, jujube, fig, mulberry, pecan, chestnut, chineopin and raspberry, all grow and bear as finely here as any place on earth, and never miss a crop any year. From an experiment I made this year on a poor ridge, I find our poorer lands, without manure, will yield seventy-five bushels of pin-dars and one ton of hay per acre. The pin-dar tops are equal to the best clover for hay, and resembles it very much. I have raised fine turnips on new land, with no other manure than three barrels shell lime to the acre, many of the turnips seven and a half inches across; but mostly four to six inches, planted 6th Sept. last. We raise from seventy-five to one hundred and fifty bushels sweet potatoes to the acre, and I think with proper culture could raise over two hundred.

I know of no spot within a mile of the sea shore, where there is not plenty of decomposed vegetable matter, in low places, or the bottoms of slow running streams. These beds of manure lay parallel with the sea shore, and rarely more than two hundred yards apart; they are from ten to two hundred yards wide, and from one to six feet deep, of *purely decomposed vegetable matter*. Since reading Dr. Dana's Muck Manual last summer, I have made some experiments with this muck, mixing lime with it, and am persuaded it will answer as well as the best stable manure for our lands. I planted my watermelons in hills thus prepared last spring, and had more melons than I expected by thousands, many hundreds were permitted to rot in the field. The earliest ripened 28th May. I am now preparing to plant a small vineyard with *cuttings*, and if I do not make 5000 gallons of wine to the acre in the summer of 1846, I shall not realize my present expectations. I have planted one hundred olive cuttings and thirty of the jujube trees, to get a start of those fruits. The undoubted health of our country and our delightful Southern sea breezes, and convenience to the New Orleans and Mobile markets, must make the growing of fruits and vegetables here a very important, profitable and desirable business.

I have lately procured a small flock of sheep; they were raised in this country, and have never tasted food except what they get in the forest; they look well, and have a good coat of wool, and I think will double their number in another month. Several gentlemen have



visited this part of the country lately, with the object of examining its capacity to graze sheep, goats and other stock; to yield turpentine, tar, resin, lampblack, &c., and all have been much pleased with the prospects, and many of them are now preparing to locate here permanently, and consult "health and contentment," with a reasonable competence, instead of fretting away their lives in a sickly country, stimulated alone by the ephemeral idea, of making cotton bales or sugar hogsheads by the hundreds or thousands.

The importance of our fisheries may be judged of from the fact, that many persons come here from the North every fall with their fishing smacks, and continue the business until spring, when they return North to spend the summer with their families, but are back again with the first frost.

Very respectfully yours,

JNO. J. McCaUGHAN.

We need only say that we heartily approve of the suggestions below of Mr. Robinson, in getting up the dinner at the forthcoming meeting, of the N. Y. State Agricultural Society at Rochester, next September. It is the same manner in which the Fourth of July is usually celebrated in New England, and more delightful re-unions are not known. We sincerely hope that a strong body of our prairie friends will be present; we assure them that they will be heartily welcome—wives, daughters, and all. We expect a goodly number of our Canadian neighbors will be present at Rochester, and as for New York, especially west of Cayuga Bridge, we hope to witness such a turn out as she never yet made even in the most exciting political times. We anticipate a superb show of everything in the farming line in September, and a full and enthusiastic meeting.

*For the American Agriculturist.*

DINNER AT THE NEXT MEETING OF THE N. Y. STATE AGRICULTURAL SOCIETY.

MESSRS. A. B. & R. L. ALLEN:

Well, and so you "hope to have three thousand guests at an agricultural dinner at Rochester, at your next State Fair." Then let me tell you how,—you must adopt the western fashion, and have a *free dinner*. It is easily got up, and no one feels the expense. Let a few of the spirited friends of these great holidays and farmer's festivals, in the vicinity of Rochester meet together, a few weeks before the Fair, and appoint a "dinner committee," whose business it shall be to see that a suitable spot of ground is selected, and tables and seats built of rough boards, that any lumberman will lend for the occasion,—and so will some crockery merchant, who desires the custom of the farmers, lend the necessary articles, while a few bolts of cotton sheeting, that will be readily donated by the merchants, will make very good table *linen*, though I would much prefer to see the tables covered with a real home-made flaxen cloth. And now for the substantial, where-withal to crown the tables, and furnish forth the joyous feast, that will be a real "thanksgiving dinner" to the twice told three thousand happy human beings who will partake of it.

Let the word once go forth, that the farmers, and the

farmer's wives, and sons and daughters, are going to provide the feast, and my word for it, you will see such a display of good things as you never saw collected together at one dinner party before. Even many of the dwellers in the city will be aroused by the excitement and novelty of the scene, and pour forth their contributions of delicacies, that will serve by way of desert to the more substantial viands of the farmers. This is the only plan of a public dinner that affords an opportunity for all parties, classes, and sexes to meet together in the full, free, unrestrained enjoyment of life. Every farmer should bring his family, for those who furnish the good things should also be present.

This is the kind of dinner, and this is the way that so great a number met together at our great dinner in Illinois, which I have mentioned in the article to which your note referred to, is appended.

There was a little incident at that dinner, which I should like to see imitated at every similar one. Two daughters of a very respectable farmer, appeared in beautiful woollen shawls, entirely the work of their own hands, even from the rearing of the lambs that produced the fine wool, to the last finishing stroke of the excellent fabric. They were publicly complimented at the table, and the association of ideas in my mind at the time, tended much to heighten the natural beauty of their faces, which showed much good sense in every feature. And such incidents will often happen, and be commented upon and patterned after, if such occasions are given to bring them to light. I look upon these great family dinners as one of the very best features in our agricultural shows. These are shows of human nature. They ought to be fostered and encouraged.

Addresses, conversations, toasts and sentiments, at such a time, make deep impressions upon the mind. And if you wish me "and others of my prairie friends to be with you and partake of the good things" at your next State Fair, you must get up a public dinner after our fashion. Try it; it will go well and do good.

Your friend,

SOLON ROBINSON.

Lake Co. H., Ia., Jan. 25, 1843.

TO CORRESPONDENTS.

We had prepared a short article on the prices of wool and further protection, in answer to Mr. Gidings, an Illinois Farmer, and others, but wishing to wait some more information on this important subject, defer it till April No. Communications are received from John Lewis, A. Campbell, Wm. Partridge, Charles Starr, Jr., Solon Robinson, John J. McCaughan, L. F. Allen, T. L. C., Americus, and H. A. Field, which shall appear in our next.

Mr. Hussey's request is acceded to. The engravings should be here as early as the 15th March, to appear in our April No. All matter that is not sent in by the middle of the month hereafter, must necessarily lay over till next number, and it would be better to have it come in as early as the 10th. In order to get our work out promptly, it has become necessary to go early to press.

As our own article on the cultivation of Sugar Beet would extend to two numbers, we have concluded to defer it till April, so as to give it complete to our readers in the 2d volume.

We had written an article entitled "Rural Walk in the City," noticing the splendid seed stores and nursery establishments here, but found too late that we had not room for it. The "Selections" which appear in this No., have been in type some time—we shall condense hereafter and give the substance only of such papers.

## SELECTIONS.

## Lime Kilns.

Limestone used to be calcined in a very rude kiln, formed by enclosing a circular space of 10 or 15 feet diameter, by rude stone walls 4 or 5 feet high, and filling the cylindrical cavity with alternate layers of turf or coal and limestone broken into moderate pieces. A bed of brushwood was usually placed at the bottom, to facilitate the kindling of the kiln. Whenever the combustion was fairly commenced, the top, piled into a conical form, was covered in with sods, to render the calcination slow and regular. This method being found relatively inconvenient and ineffectual, was succeeded by a permanent kiln built of stones or brick-work, in the shape of a truncated cone with the narrow end undermost, and closed at bottom by an iron grate. Into this kiln, the fuel and limestone were introduced at the top in alternate layers, beginning, of course, with the former; and the charge was either allowed to burn out, when the lime was altogether removed at a door near the bottom, or the kiln was successively fed with fresh materials, in alternate beds, as the former supply sunk down by the calcination, while the thoroughly burnt lime at the bottom was successively raked out by a side door immediately above

the grate. The interior of the lime kiln has been changed of late years from the conical to the elliptical form; and probably the best is that of an egg placed with its narrow end undermost, and truncated both above and below; the ground plot or bottom of the kiln being compressed so as to give an elliptical section, with an *eye* or draft-hole towards each end of that ellipse. A kiln thus arched in above gives a reverberatory heat to the upper materials, and also favors their falling freely down in proportion as the finished lime is raked out below; advantages which the conical form does not afford. The size of the draft-ways for extracting the quick-lime, should be proportionate to the size of the kiln, in order to admit a sufficient current of air to ascend with the smoke and flame, which is found to facilitate the extrication of the carbonic acid. The kilns are called *perpetual*, because the operation is carried on continuously as long as the building lasts; and *draw-kilns*, from the mode of discharging them by raking out the lime into carts placed against the draft-holes. Three bushels of calcined limestone, or lime-shells, are produced on an average for every bushel of coals consumed. Such kilns should be built up against the face of a cliff, so that easy access may be gained to the mouth for charging, by making a sloping cart road to the top of the bank.

FIG. 19.

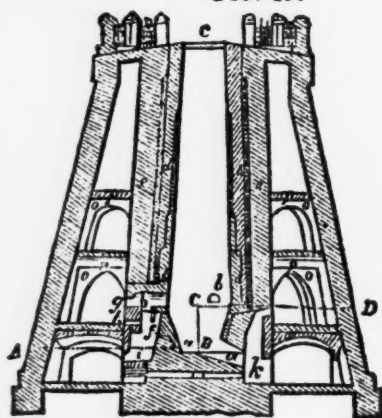


FIG. 21.

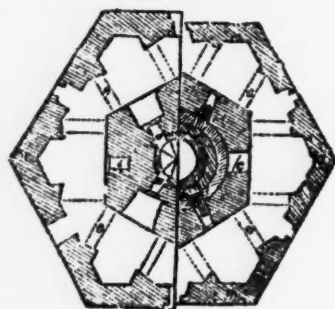


FIG. 20.

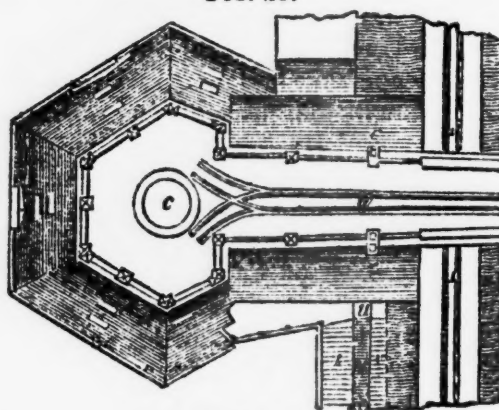
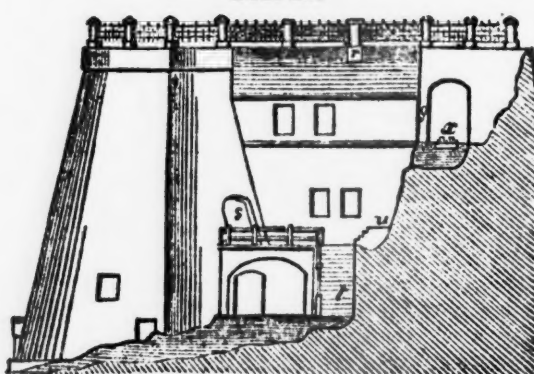


FIG. 22.



Figs. 19, 20, 21, 22, represent the lime kiln of Rüdgersdorf, near Berlin, upon the continuous plan, excellently constructed for economizing fuel. It is triple, and yields a threefold product. Fig. 20, is a view of it as seen above; fig. 22, the elevation and general appearance of one side; fig. 19, a vertical section, and fig. 21, the ground plan in the line *a n c n* of fig. 19. The inner shaft fig. 19, has the form of two truncated cones, with their larger circular ends applied to each other; it has the greatest width at the level of the fire-door *b*, where it is 8 feet in diameter; it is narrower below at the discharge door, and at the top orifice, where it is about 6 feet in diameter. The interior

wall *d*, of the upper shaft, is built with hewn stones, to the height of 38 feet, and below that for 25 feet, with fire-bricks *d d*, laid stepwise. This inner wall is surrounded with a mantle *c*, of limestones, but between the two there is a small vacant space of a few inches filled with ashes, in order to allow of the expansion of the interior with heat taking place, without shattering the mass of the building.

The fire-grate *b*, consists of fire-tiles, which at the middle, where the single pieces press together, lie upon an arched support *f*. The fire-door is also arched, and is secured by fire-tiles. *g*, is the iron door in front of that orifice. The tiles which form the grate have three



or four slits of an inch wide for admitting the air, which enters through the canal *h*. The under part of the shaft from the fire to the hearth, is 7 feet, and the outer enclosing wall is constructed of limestone, the lining being of fire-bricks. Here are the ash-pit *i*, the discharge outlet *a*, and the canal *k*, in front of the outlet. Each ash-pit is shut with an iron door, which is opened only when the space *i* becomes filled with ashes. These indeed are allowed to remain till they get cool enough to be removed without inconvenience.

The discharge outlets are also furnished with iron doors, which are opened only for taking out the lime, and are carefully luted with loam during the burning. The outer walls *l m n* of the kiln, are not essentially necessary, but convenient, because they afford room for the lime to lie in the lower floor, and the fuel in the second. The several stories are formed of groined arches *o*, and platforms *p*, covered over with limestone slabs. In the third and fourth stories the workmen lodge at night. See fig. 22. Some enter their apartments by the upper door *q*; others by the lower door *s*. *r* is one of the chimneys for the several fire-places of the workmen. *t u v* are stairs.

As the limestone is introduced at top, the mouth of the kiln is surrounded with a strong iron balustrade to prevent the danger of the people tumbling in. The platform is laid with rails *w*, for the wagons of limestone, drawn by horses, to run upon. *x* is another rail-way, leading to another kiln. Such kilns are named after the number of their fire-doors, single, twofold, threefold, fourfold, &c.; from three to five being the most usual. The outer form of the kiln also is determined by the number of the furnaces; being a truncated pyramid of equal sides; and in the middle of each alternate side, there is a fire-place, and a discharge outlet. A cubic foot of limestone requires for burning, one and five-twelfths of a cubic foot of wood, and one and a half of turf.

When the kiln is to be set in action, it is filled with rough limestone, to the height *c d*, or to the level of the firing; a wood fire is kindled in *a*, and kept up till the lime is calcined. Upon this mass of quicklime, a fresh quantity of limestone is introduced, not thrown in at the mouth, but let down in buckets, till the kiln be quite full; while over the top a cone of limestone is piled up, about four feet high. A turf-fire is now kindled in the furnaces *b*. Whenever the upper stones are well calcined, the lime under the fire-level is taken out, the superior column falls in, a new cone is piled up, and the process goes on thus without interruption, and without the necessity of once putting a fire into *a*; for in the space *c d*, the lime must be always well calcined. The discharge of lime takes place every 12 hours, and it amounts at each time in a threefold kiln, to from 20 to 24 Prussian *tonnes* of 6 imperial bushels each; or to 130 bushels imperial upon the average. It is found by experience, that fresh-broken limestone which contains a little moisture, calcines more readily than what has been dried by exposure for some time to the air; in consequence of the vapor of water promoting the escape of the carbonic acid gas; a fact well exemplified in distilling essential oils, as oil of turpentine and naphtha, which come over with the steam of water, at upwards of 100 degrees F. below their natural term of ebullition. Six bushels of Rudersdorf quicklime weigh from 280 to 306 pounds.

When coals are used for fuel in a well-constructed perpetual, or draw kiln, about 1 measure of them should suffice for 4 or 5 of limestone.

The most extensive employment of quicklime is in agriculture, on which subject instructive details are given in Loudon's *Encyclo. of Agriculture and Gardening*.

(From *thr Plymouth (Eng.) Herald*.)

**Practical Directions for the Place and Management of the Dung-heap.**

Farmers have generally found out the advantage of having a dung-pit instead of a dung-heap; but still the rich drainage of the dung is much of it allowed to run away; the urine from the stables, &c., does not half of it run into the dung, though it is the best part, the essence of the whole; and the privy manure, which is better still, is mostly neglected altogether.

All drainings from the stables, cow-houses, and styes, should run into the pit, and the overflowings should be caught in another pit, to throw back in dry weather.

The following is a cheap and effectual method of doing all this:—When convenient, the pit should be on the north side of a wall, or of some trees, to shade off the sun; or under a shed, to keep off both sun and rain; but these advantages cannot always be had without too much cost.

Having selected the best place for your pit, first lay in way soil, peat, or any soil as different as possible from that of your farm, and give it a hollow surface, like a great tea-saucer. Upon this lay potato stalks, and any other vegetable matters, easy to ferment, and hereupon a layer of dung. Next a layer of vegetable matter, as peat, turf, bark, rotten weeds, ferns, leaves, or any kind of dead vegetable, to increase your quantity; and so every week, cover your dung from the stables, styes, &c., with three or four times as much dead vegetable matter; thus making up your heap in alternate layers. The urine should all run into the pit from stables and all, by narrow drains, where it will not be much exposed to evaporation; and another such drain should lead from it to a lower pit, to catch the overflowings when there are any; and keep them to throw back upon the dung in dry times. This lower pit should be deeper and smaller than the other, and must never be allowed to overflow, as that would be waste. It may contain cabbage stumps, and other things difficult to work, which may be thrown back upon the heap as they rot.

The lower pit may be used as a store of liquid manure, for watering young corn, in May or June; which gives it a start, and much strengthens its growth. In leaky ground, the bottom of the pits should be *staunch*ed with clay; and stones or gravel stamped in, to harden it.

The privy should discharge into the large pit, if possible, or else into the small one; and coal ashes (but not wood ashes,) are good to throw where this comes out. Saw-dust or turf-dust from the stacks do very well. House-washings, as soap-suds, &c., should also be thrown on the heap; but the wash of the country, and heavy floods of rain should not be allowed to enter it, but be led into the meadows by other channels.

In wet seasons, the top should be slanted to turn off the rain.

Each layer of dung being covered with a layer of peat or other dead vegetable matter, the whole heap, when finished, should be crusted over with way soil, or other earth, to retain the vapors.

The fermentation will be slower or quicker, as it is more or less covered and compressed.

Wherever your heaps are made, whether in the yard or the field, give them a bed of some sort to absorb the drainage, and crust them over with soil, and mix all up with the dung before spreading. The drainage carries down the strength of the heap; sometimes enough to kill the seed in the place where the heap stood; whilst it would have been of the greatest benefit if spread out with the dung.

*Portable Manures, containing great strength in small compass.*

These are very valuable to the farmer at a distance from towns, one load being, in many cases, sufficient for several acres. They generally force or forward the crop, without doing much to enrich the soil with humus.

Salt, 1 ton (value 25s.) is enough for 10 to 20 acres top dressing; though much more is used when plowed in to kill weeds, &c. For this purpose a ton may go to 3 or 4 acres.

Soot is an excellent top dressing, twenty bushels per acre; perhaps still better with two or three cwt. salt, just damped to prevent flying about in spreading. It should be sown upon wheat in calm evenings, when rain is expected.

Gypsum, on clover, when wet with dew or rain, and the weather clearing, that it may stick on the leaf; 5 or 6 cwt. per acre.

Bone-dust, excellent to drill in with turnip seed, 10 to 30 bushels per acre; and better mixed with half or quarter as much wood ashes. A top dressing of the turnips, after hoeing; of gypsum, 3 cwt. and salt 1 cwt. per acre, would probably help the bone-dust.

Nitrate of soda, and some other more expensive manures, seem to pay very well, when judiciously used; but the object of this paper being to help the small farmer forward, with but little outlay, they need not be dwelt on here.

It will be well, however, for the farmer, to know that lime, in compost with three or four times as much ditch or pond mud, laid out not very thick, and occasionally turned, gradually produces nitrate, more or less, according to the quality of the mud.

I am, Sir, yours, &c. &c.

13th Sept. 1842.

J. PRIDEAUX.

#### Potash as a Manure for Wheat.

Mr. W. M. Chatterley delivered his ninth lecture at Havering Bower, near Rumbold, on Monday, 19th ult. on Saline Manures, in continuation.

The subject first spoken of was the manures containing potash as a base, those of soda having been treated in the last lecture. Potash was shewn to be present in every crop—nay, in almost every plant, more particularly in white crops which contained silica, (sand or flint) in considerable quantity; and most of all was it essential for wheat, as that plant contained, of all crops, the largest per centage of silica, and by potash alone could silica be taken into solution, so as to be absorbed and circulated with the sap of the plant, and subsequently deposited with its tissue. Moreover, it had been of late years discovered that those soils which yielded the most abundant wheat crops, always contained the larger quantity of potash, and that clay soils contained it naturally in considerable quantity—that is, considerable in proportion to the quantity required; for, it was well worthy of remark, that the quantity of potash contained in the wheat was by no means sufficient for the solution of the quantity of silica existing in the plant, and this led to the belief that the potash which conveyed the silica in solution to the plant, was returned to the soil, after having deposited its burden, and there again acted the part of a solvent for a fresh portion of silica, again to be conveyed to the crop. Wheat, unless supplied with a sufficiency of soluble silica, could not grow strongly and healthily; hence the necessity for the presence of potash, in order to its abundant supply; but not potash alone, but potash (itself an alkali) in union with an acid to neutralise its caustic properties, and form a salt. Thus CARBONATE OF POTASH (the *pearlash* of commerce,) and

NITRATE OF POTASH (*nitre* or *saltpetre*,) were useful as manures in soils deficient of potash. The source whence these might be obtained most cheaply by the agriculturalist requiring potash, and the value of each as a manure, was the next point for consideration. With respect to *pearlash* or *nitre*, the price would probably exclude them from general or extensive use; but, if we look to the sources whence they may be obtained, we shall find them, for the most part, within the reach of all. The *pearlashes* of commerce are obtained from wood ashes in such countries as Canada and Russia, abounding in forest land. The ashes of various kinds of trees, shrubs, and herbs, contain quantities of this salt, varying from less than 1-10, as in the beech, oak, and elm, to about 7½ per cent., as in the wormwood. Herbs contain more than shrubs, shrubs more than trees, while the leaves and branches of trees contain more than the woody portions. Wood ashes, besides, contain varying quantities of silica, phosphate and carbonate of lime and magnesia, all highly useful for plants, containing matters which are the direct food for plants, as might readily be supposed, inasmuch as they are themselves the ashes of plants. Can potash be always obtained in sufficient quantity by these means? There are the hedge rows, bottoms, and woodland, unfortunately too frequent upon the generality of farms, which it is desirable to remove as much as possible; by burning these and mixing with the dung, or spreading over the land without much mixture, much benefit might be derived. But another question arises—Is it economical to consume so much vegetable matter which might be used as manure, if the seeds were prevented from germinating and the substance broken up, as might be effected by means of lime on the draining of the farm-yard? The one method or the other, or in fact both, are at the option of the agriculturalist, as he may be in want of either, or may find each the cheaper or more convenient. Carbonate of potash is deliquescent (attracts moisture;) the same remark will, therefore, apply to this salt as was made with regard to those deliquescent salts mentioned in the last lecture.

With regard to NITRE, a considerable supply would be procured by the mixture of lime and vegetable matter left in contact for some length of time, which produced a decomposition of the vegetable matter, the carbon of which being converted into carbonic acid, united itself to the lime and formed chalk; while any portion of nitrogen which it contained, together with a supply obtained from the atmosphere, was, by the influence of the lime, induced to unite with the oxygen of the atmosphere, forming nitric acid; the nitric acid then combined with the lime to form nitrate of lime, and with any portion of potash that might be present to form nitrate of potash. By this means it may be observed that nitrogen and potash are both supplied at the same time, and to the nitrogen must be attributed a large share of the fertilising effect of the salt; and this leads us to the consideration of the other saline manures which contain NITROGEN. NITRATE OF SODA is nothing more than another native *nitre* with *soda* instead of potash as the base in union with nitric acid; it is, perhaps, yet to be decided which of these two possesses the most fertilising properties, though the preponderance (especially for crops that contain potash,) is perhaps in favor of nitrate of potash. The difference of price will decide which will be used by the farmer: but it seems more than probable that other and cheaper sources of nitrogen will be chosen when it is desirable to supply this substance in a saline form. Farm-yard manure, and animal matter in general, as nightsoil, urine, blood, and guano, have already been



spoken of as containing salts of ammonia, and ammonia has been shown to consist of hydrogen and nitrogen. The superiority of ammonia over nitric acid for the supply of nitrogen to plants is undoubted, and seems to be due to the greater facility with which it undergoes decomposition, forming the various nitrogenous products of vegetables, as gluten, alumen, &c., while the facility with which hydrogen (the other constituent) unites with the universally present oxygen to form water, is an additional cause of its fertilising effects.

SULPHATE OF AMMONIA seemed the salt best adapted for the use of the farmer, to supply his crops with nitrogen. This salt was now prepared by Mr. Croll's patent process for the purification of coal gas, and might be bought for about 16s. the cwt., and would most likely become much cheaper, as an inexhaustible supply might be procured by fitting up Mr. Croll's apparatus at the various gas works throughout the kingdom; a result which would no doubt ensue upon the demand of this article becoming general among agriculturists, who could not better consult their own interests than by using this salt—not in large quantities, for in most seasons from 1-2 to 3-4 of a cwt. per acre, as a top dressing, applied at two or three separate periods, would be found preferable; and with this, as with all the saline manures, small dressings judiciously applied, according to the condition of the crops, were more successful than large dressings of two or three cwt. or more, at a time, as recommended for some saline manures, or of forty to fifty cwt, as recommended for others. These small dressings would be proportioned to the wants of the crop, neither burning them up, nor making them too growthy, as has been complained of in some instances. Soot owes its efficacy to sulphate of ammonia contained in it. With regard to the efficacy of sulphate of ammonia, Mr. Chatterley shewed a tabular review of the result of experiments conducted upon a bad plant of wheat, on Mr. Hall's farm, with different quantities of this salt, in proof of the latter statements; the increase had been altogether beyond expectation: it should not be drilled with the seed.

With regard to saline manures in general, they, like all others, should not be applied unless the land is deficient in the substances which they, by their constituents, are fitted to supply; nor to land which is not properly drained; and, with regard especially to manures containing hydrogen, it should be remembered that, in order that they may stimulate the plant to growth, the vegetable matter must be present in the soil in sufficient quantity to supply the material, for though much may be obtained from the atmosphere, such as nitrogen and carbonic acid, still the soil should be in a good condition to supply more carbonic, phosphoric, and muriatic acids, lime, potash, soda, and magnesia, silica, &c., as these cannot be obtained elsewhere, and are absolutely necessary to the healthy existence of the plant. It is for want of a due attention to all these circumstances that so many contradictory accounts of the value of saline manures are propagated, that so much of unmerited praise and blame have been bestowed upon them.—*Ibid.*

#### To Preserve Sheep from the Gad Fly.

In vol VII of the N. E. Farmer, we find the following remarks upon this subject, by Mr. Fessenden:

"There exists in some parts of the country, a species of fly, which naturalists call *Æstus avis*, of the same genus with that which deposits eggs in the hair of horses, and causes botts. This fly attacks sheep from about the middle of August to the middle of Sep-

tember, deposits its eggs in the nostrils of the animals, and causes those worms, which so frequently destroy them. The Mechanic's Gazette recommends as a preventive, covering the nostrils of sheep with a list of gauzy substance, through which the animal can breathe, and keeping it in place by some adhesive substance. We doubt, however, the practicability of 'keeping it in its place.' Another preventive which sheep-owners tell us is effectual, is to keep the noses of the sheep constantly smirched with tar, from about the middle of August to the latter end of September. If the sheep swallow some of the tar, so much the better, as it prevents or cures the rot, and confirms their health.

If the fly has performed its mischievous function and the seeds of the disorder are already sown, you may make use of the following: take half a pound of good Scotch snuff, pour two quarts of boiling water on it, stir it and let it stand till cold; inject about a table spoonful of this liquid and sediment up each nostril of the sheep with a syringe. This must be repeated three or four times at proper intervals, from the middle of October to the 1st of January; the grubs are then small and are easier destroyed than afterwards, and have not injured the sheep as they will if deferred until later. Half an ounce of assafetida, pounded in a little water, and added to the snuff, will make it more effectual. The owner of the sheep need not be alarmed when the operation is performed, to see the sheep very drunk and apparently in the agonies of death, as they will in a few minutes recover. I never knew any bad effects to follow. Dry snuff may be blown up the nose with a quill, and have a good effect; but it is a tedious dirty job. I have tried vinegar and blue dye with but little or no success.

Instead of Scotch snuff, a decoction of tobacco will answer the purpose. A gentleman who owns a large flock of sheep, informs us that he had used it with perfect success. Spirits of turpentine is injected into the nostrils of sheep, as a remedy for worms; but that substance appears to possess one material disadvantage, which should preclude its use for that purpose, namely: when thrown into the nostrils it kills the sheep as well as the worms.—*N. E. Farmer.*

#### The Lead Trade.

The St. Louis Republican, on the authority of a respectable merchant of Galena, Ill., gives a statement of the quantity of lead exported from Galena, Dubuque, and all other points on the Upper Mississippi, by the river, and by Lake Michigan, during nine months, from March to November inclusive, in the years 1841 and 1842. Most of it is shipped in the form of pig lead, each pig weighing 70 lbs. Some is sent off in bars, and some in shot; but they are both reduced to pig in the statement; and the money value is annexed.

In 1841, the whole number of pigs sent by the Mississippi, was 455,814; by the Lake, 884 boxes bars, equal to 2750 pigs, and 2616 kegs shot, equal to 7640 pigs, making the total for 1841, equal to 493,404 pigs.

The price of the pig is put at 3 cts per lb., the bars, at 3 ½ cents, and the shot at 4 ½ cts. The total value in 1841, was \$982,243.

In 1842, the whole number of pigs shipped by the river, was 447,859 pigs, and by the Lake, 25,000 pigs, and in the form of bars, what was equal to 840 pigs; making the total number of pigs 473,699, in 1842.

The price in 1842, was less than in 1841, being an average of about 2 ½ cts. per lb. for pig, and 3 cts. for the lead in bars. The total money value for the whole export of 1842, is put at \$746,359 28.

From this statement it is plain that the Lead Trade is becoming a very important one.—*Atl. Daily Atlas.*

**RAMBOUILLET WOOL.**—We have at our office a specimen of this article, taken from a buck at Hartford, Conn., belonging to Mr. D. C. Collins. It was sent to us by Dr. M. W. Phillips, of Log Hall. It is remarkably fine.—*Southwestern Farmer*.

Agreeably to our request, Mr. L. B. Parsons of the Commercial Garden and Nursery, of Parsons & Co., Flushing, L. I., will furnish us a monthly calendar, suited to the latitude of New York, of the work necessary to be done in this department; and as he is a practical as well as a professional man, our readers may look to his remarks as a safe guide for their horticultural operations. His hints will be brief and general, rather than minute.

#### HORTICULTURAL CALENDAR FOR MARCH.

**Kitchen Garden.**—Hot-beds should now be made for bringing forward early cucumbers, melons, cabbages, cauliflowers, lettuce, radishes, &c. As soon as the frost is out of the ground, dress asparagus beds, or plant out new ones. Roots for this purpose ought not to be over two years old.—Sow peas, celery, parsley, onions, carrots, and all other root crops for early table vegetables, in the open ground. Tomatos, eggplants, and peppers, should be sown in pots, and forwarded in hot-beds for planting out next month.

**Fruit Garden and Nursery.**—Grape-vines that have not yet been pruned, must now be attended to, care being taken to leave two or three buds of last year's growth to bear fruit the ensuing season.—Fruit trees of every variety can also be pruned, although I am inclined to think that trees flourish best with summer pruning.—Trees of all kinds ought to be transplanted as soon after the frost leaves the ground as possible.—Dress strawberry beds, and see them cleaned of all weeds.—Prune and plant out gooseberries, currants, and raspberries.—Cuttings at this time can be made for the propagation of trees, shrubs, and roses of the hardy kinds; the latter should be first started under glass, but sheltered from the sun.

**Ornamental Grounds,** in which bulbs have been planted the preceding fall, stir to the depth of 3 inches. Make up the borders of the Flower Garden. Sow the more tender varieties of annuals in hot-beds the latter part of the month, at the same time perennial herbaceous plants can be transplanted.—Trim shrubs and hedges, and set out box edging.—See that the pleasure grounds and gravel walks are put in order.

L. B. PARSONS.

#### FOREIGN AGRICULTURAL NEWS.

By the Steam Packet Acadia, which left Liverpool on the 5th February, we are in receipt of news from Europe up to this date; but our summary will be somewhat meagre compared with that of last month, as most of our journals are left in Boston to come on in case, instead of being sent by express, and we cannot detain the press for them.

**MARKETS.**—Cotton had arrived in such large quantities, and the last year's crop was talked of as being so large, that it has had the effect of lowering the price, and we regret to see that this great staple has fallen from a  $\frac{1}{4}$  to  $\frac{1}{8}$ d. since our last advices. We suspect that the quantity exported from this country has been somewhat overrated by foreign purchasers, and we hope before the whole crop gets to market, that there may be

a slight reaction.—Rice has fallen a trifle.—Tobacco remains without change, though of rather slow sale.—Flour is dull.—Provisions generally the same, except dry hams, which are selling fairly.—The first Beef packed in the United States to suit the English market, was landed in London on the 1st of February. It seems to be well liked, especially some extra Mess for family use, shipped from this city. The bad qualities of Beef and Pork exported from this country to England last year, greatly prejudiced the dealers against American provisions, and we must expect some little time to pass yet before this will wear away. We can only overcome it by continuing to send superior qualities of provisions hereafter to market, and especially in having them put up to suit European tastes.

Money still continues very abundant, and first rate bills are discounted as low as  $1\frac{1}{2}$  to 2 per cent.

**CORN LAWS.**—Sir Robert Peel declares that he shall oppose all further change in the Corn Laws at present.

**Cotton in India.**—From all the accounts we can gather, we infer that the climate is so uncertain that cotton cannot be produced in India as cheaply as in America, notwithstanding the low price there of labor and land. Our Cotton planters have not so much to fear therefore from this quarter, as they anticipated a year since.

**Cultivating Truffles.**—A French paper says, that truffles can be cultivated as easily as any other vegetable, as it has been found that they grow near or under the shade of a peculiar species of oak. A farmer at Dorlogne sold 100,000 francs worth (nearly \$10,000) last year, and expects the coming season to dispose of twice this amount.

From the London New Farmers' Journal we condense some items:

**Epidemic among Stock.**—This has again broke out in the midland grazing districts of England, although not with the same virulence as when it appeared three years since.

**Fattening Sheep.**—An experiment was made at Shrewsbury in fattening three sheep on peas, allowing them at the same time to run in pasture. They gained 39 lbs. in 21 days, an average of nearly 10 oz. each per day, which we think extraordinary.

**Tan as Manure.**—This is found to answer an excellent purpose in improving the sheep pastures on the downs.

**Great Weight of Twin Steers.**—A pair of these were killed by Mr. Dawson, of Rutland, at two years and five months old, which weighed 1,788 lbs.

**Lime-water to kill Worms.**—To six quarts of water, add half a pound of caustic lime, and after letting it stand a few minutes, commence watering the ground infested by worms, and they will soon be seen rising to the surface writhing about, and will die in a few minutes, especially if a little more of the lime-water is then sprinkled upon them.

**The number of Cattle in Great Britain and Ireland,** is estimated at 7,000,000, that of sheep 32,000,000, the total value of which at present prices there, is 110,000,000*l*.

**Agricultural Chemistry.**—Dr. Tilley is at work upon a new treatise on Agricultural Chemistry for Practical purposes, including the best methods of feeding stock and fattening cattle. He intimates that this work will be unincumbered by scientific terms, but how that can be and clearly express his ideas, we are at a total loss to divine.

**Marine Shell sand for Manure.**—In a paper read before the Highland Agricultural Society, by F. W. Clark, he proves by experiment, that marine shell sand is a good fertilizer as a top dressing for old pastures,



and he is now using 300 tons annually on one farm alone. He also uses it in compost and stable manure, and mixed with sea-weed, and finds that it brings in clover and other valuable herbage before unknown upon his land. We hope some of our sea coast farmers will take a hint from this experiment, and try the effect of shell sand on the Atlantic borders. Mr. Clark also finds by planting potatoes whole instead of cuttings, is a remedy against the seed becoming diseased. We should like to know whether this has any effect upon the curl in potatoes.

**Excretions of Plants.**—From an Essay on the Radical Excretions of Plants, by A. Gyde, he infers from a series of experiments:—

1. That most plants impart to water certain soluble substances or excretions.

2. That this is identical with the sap of the plants.

3. That plants have no power of selection, but take into their texture any solution offered to their roots, and that they have little or no power of again excreting it.

4. That plants watered with excretion receive no injury from it.

**Monument to the Earl of Leicester.**—Nearly 5000l. have already been subscribed towards erecting a monument to the late Earl of Leicester, as a testimony of his worth and the improvements made by him in agriculture.

**Dead weight of Stock at Smithfield.**—The dead weight of the largest prize ox exhibited at the late Smithfield Show, was 2,117 lbs. He was a Short-horn, and only 4 years 10 months old. The largest Long-woolled sheep weighed 204 lbs., at 1 year 8 month sold. The largest South-down, at 2 years 8 mos. old, weighed 165 lbs., others 1 year 8 months old, weighed 133 lbs. With pigs the largest was 236 lbs., at 32 weeks old.

**The London Farmers' Magazine** for February is embellished by a portrait of one of the old Long-Horned bulls—a pretty good animal—and a party of Sportsmen on horseback leaping a high fence. This last is called "Getting into Difficulty," and is graphically done.

**Sheep Stock.**—After discussing the management of sheep at the Framingham Farmers' Club, it was resolved that they should have free access to either rock or common salt—that nothing is preferable to common hurdles for folding them in fields—that pasturing old clover leys with them, destroys many of the slugs and wire worms, and that their feeding the young wheat in the spring is beneficial.

**Recipe for the Hoven in Cattle.**—The Hadleigh Farmers' Club recommends the following recipe for blown or hoven cattle: 1 lb. glauber salts,  $\frac{1}{2}$  lb. of treacle, and 1 oz. of ginger mixed with one pint and a half of warm water. Powerful stimulants, such as ammonia, are also recommended.

**Scours in Sheep.**—In case of their being thus attacked, a small dose of castor oil should be given to remove any offending matter from the bowels, after which four grains of opium and 1 oz. of chalk, and then put them upon dry food.

**The Veterinarian** for February is full of able articles, but we dare not enter even upon a synopsis of them. If the public would countenance us in issuing a Three Dollar Magazine, to contain reprints and translations, accompanied with numerous engravings from European periodicals, we would give them such an interesting and valuable work as they have but a faint idea of.

**Agricultural Improvement in Ireland.**—The Marquis of Waterford having about 40,000 acres of land in the County of Derry, with 800 tennats upon it, has commenced a thorough course of draining on the Deanston system, by which it is supposed that the crops hereafter will be at least doubled.

In the *Gardeners' Magazine* for February, we find that charcoal as a manure is coming into pretty general use. It proves very beneficial wherever applied.

**May's Red Victoria Currant.**—The berries of this magnificent currant are said to measure not unfrequently  $1\frac{1}{2}$  inches in circumference, and the bunches 6 inches in length. The fruit is a beautiful scarlet, and the flavor excellent. The foliage is thicker than the common red currant and hangs on later, and of course assists in prolonging the fruit.

**Hubshee Grape.**—This has lately been introduced into Europe from India, and is nearly 3 inches in circumference and  $1\frac{1}{2}$  inches long.

**Talavera Wheat** produced in the Isle of Jersey last year, at the rate of 66 $\frac{1}{2}$  bushels to the acre. It was sown in drills 14 inches apart after a crop of potatoes, and cultivated in the best manner.

**Pomerania Cabbage** is highly spoken of as being the best autumnal kind.

**Sulphate of Ammonia** is much used now as a top-dressing on grass, wheat, and other grain.

**Paxton's Magazine of Botany** for February, presents its flowers lithographed upon a new system. They are the *Compartmentia rosea*, *Scyphanthus elegans*, *Columna splendens*, and *Paulownia Imperialis*, colored after nature, and are certainly superior in delicacy, truth, and finish, to anything we have ever before seen in works of this kind.

#### WHEAT SHEAF FARM ON STATEN ISLAND, FOR SALE.

A recent domestic bereavement has induced the Undersigned, to offer his residence on Staten Island, for sale. It is situated midway of the outer bay, on the sea shore, eight miles from the Quarantine Ferry, three from that of Rossville, and equidistant from two others, Seguin's Landing and Port Richmond.

The condition of the Farm—the extent, value, and practical usefulness of the improvements, and its peculiar advantages, are sufficiently known. It has been improved in a way to render it susceptible of six farming divisions of thirty acres and upwards each, including an appropriate allotment of woodland—each division offering a moderately elevated building location. The condition of the soil is well known to be in the best working order.

Terms to suit the Purchaser, as the object is merely to change the investment for another susceptible of equal product.

W. A. SEELY,  
New York, Feb. 16th, 1843. 218, Fulton-street.

#### ORCHARD GRASS SEED FOR SALE.

The Subscriber offers for sale Seed of the best quality of the above valuable variety of Grass, at \$2 per bushel. Apply at the Office of this paper, or to  
ROBERT WHITE, JR.  
Shrewsbury, New Jersey, Feb., 1843.

#### COMMERCIAL GARDEN & NURSERY OF Fruit and Forest Trees,

#### ORNAMENTAL SHRUBS, DAHLIAS, BULBS, &c.

FLUSHING L. I., NEAR NEW YORK.

Flushing, 3 mo. 26 1843.

PARSONS & CO.

#### SHEEP FARM FOR SALE.

The Subscribers offer for sale, or to let, their extensive Sheep Farm, situated in La Salle County, State of Illinois. The Farm consists of upwards of 1500 acres, over 400 being enclosed by substantial picket fence, and improved; the balance dry rolling prairie and timber, most admirably adapted to sheep husbandry, for which purpose it has been used by the Subscribers for the last two years successfully.

The Flocks of Sheep can be sold at the same time, if purchasers are inclined. They consist of over 1500 good strong healthy white-faced Cheviot breed; also Three Fine Paular Merino Bucks, purchased of a celebrated Breeder at the East.

If the Farm cannot be sold for cash, offers will be received for renting the same for two or three years. Apply either to JOHN ROSE, Little Vermilion, La Salle, MURRAY & WARD, Chicago, Ill., or JAMES MURRAY & Co., Buffalo, New York, either of whom will give every information wanted.

## REVIEW OF THE MARKET.

Prices Current in New-York, March 25, 1843.

ASHES, Pots, per 100 lb. ....	\$ 5 50	to	—
Pearls, do. ....	6 56	..	—
BEEWAX, Yellow, per lb. ....	29	..	29½
COTTON, Louisiana, do. ....	5	..	9
Upland, do. ....	4½	..	8
Florida, do. ....	4½	..	8
Alabama, do. ....	5	..	9
FEATHERS, American, live, per lb. ....	20	..	25
FLAX, American, per lb. ....	7	..	7½
FLOUR, Northern and Western, via Erie Canal, per bbl. ....	4 75	..	—
do. via N. Orleans, ....	4 12	..	4 50
Southern, per bbl. ....	4 12	..	4 25
RYE, per bbl. ....	3 00	..	3 25
MEAL, Corn, per bbl. ....	2 50	..	2 75
do. per hhd. ....	12 25	..	13 00
WHEAT, Western, per bushel, ....	80	..	87
Southern, do. ....	70	..	80
RYE, Northern, per bushel, ....	51	..	56
CORN, do. do. ....	50	..	—
Southern, do. ....	48	..	50
BARLEY, per bushel, ....	48	..	50
OATS, Northern, per bushel, ....	31	..	32
Southern, do. ....	23	..	24
PEAS, Field, do. ....	86	..	1 15
BEANS, White, per bushel, ....	1 21	..	1 43
CLOVER SEED, per lb. ....	5½	..	6
TIMOTHY SEED, per tierce of 7 bu. ....	14 00	..	—
FLAX SEED, rough, do. do. ....	8 50	..	9 00
clean, do. do. ....	9 25	..	—
RICE, per 100 lb. ....	2 00	..	2 75
HEMP, Russia, per ton, ....	200 00	..	—
American, water rotted do. ....	—	..	—
HOPS, first sort, per lb. ....	9	..	11
LEAD, Pig, per lb. ....	3½	..	—
Sheet and Bar, per lb. ....	4½	..	5
OIL, Linseed, American, per gal. ....	85	..	90
PLASTER OF PARIS, first quality, per ton, unground do. ....	2 25	..	2 75
BEEF Mess, per bbl. ....	6 50	..	7 00
Prime, do. ....	3 75	..	4 25
Cargo, do. ....	1 75	..	2 00
PORK, Mess, do. ....	7 50	..	9 50
Prime, do. ....	5 00	..	6 50
LARD, per lb. ....	6	..	—
BUTTER, best Table, per lb. ....	13	..	15
Western, good, per lb. ....	10	..	13
Shipping, do. ....	6	..	8
CHEESE, in boxes and casks, per lb. ....	5	..	6½
HAMS, Smoked, per lb. ....	7	..	9
Pickled, do. ....	5½	..	6½
Shoulders, smoked, ....	—	..	—
BEEF, Smoked, do. ....	6	..	7½
SALT, Liverpool, ground, sack ....	—	..	1 47
do. fine, do. ....	1 50	..	—
SUGAR, New Orleans, per lb. ....	3	..	5½
TOBACCO, Virginia, do. ....	3	..	5
Kentucky, do. ....	2½	..	5
TALLOW, American, do. ....	7½	..	7½
WOOL, American Saxony fleece, per lb. ....	32	..	37½
Full blood Merino do. do. ....	28	..	30
Half to three-fourths do. do. ....	24	..	26
Native to half do. do. ....	18	..	22
SHEEP PELTS, each, ....	—	..	—
HAY, per 100lb. ....	60	..	65
POTATOES, new, per bushel, ....	25	..	—
EGGS, per 100, ....	1 00	..	—

REMARKS.—There is no change at the Bull's Head worth noting. Cotton, from the late unfavorable news from Europe, fell in some instances last week full ½ of a cent per pound. It has slightly recovered now, and the average depression from our last month's quotations may be stated at ½ to ¾. Flour by canal has risen, more we suspect, from the short supply on hand here, than from any other cause. Southern Flour remains about the same. No wheat afloat, and quotations therefore nominal. Provisions are firmer, and but little choice Meas Beef in market.

Money continues more and more abundant, and Specie still flowing in upon us. The Banks are seeking investments, and the best paper at short sight, is done readily at 4½ to 5 per cent. On bond and mortgage and long investments, 7 per cent is still obtained. Good Stocks are advancing steadily—United States is 3 per cent above par—New York six per cents the same. About One Million in Stocks, was sold the past week in Wall Street, a greater amount than during any one week for the five preceding years.

ACKNOWLEDGEMENTS.—To J. B. Dill, Esq. and the Author, for Mr. H. B. Randall's Address before the Cayuga Co. Ag. Society—Henry Coleman, Pres. Monroe Co. Ag. Soc., for his address, one of the most beautiful productions we ever read.—Wm. P. Van Rensselaer, for address before the Rensselaer Co. Ag. Soc.—Hon. H. L. Ellsworth, of the Patent Office, for his very valuable Report.—From all the above we had marked extracts, which for want of room are deferred for April No.—To Henry Watson for a copy of Transactions of Hartford Co. Ag. Society.

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